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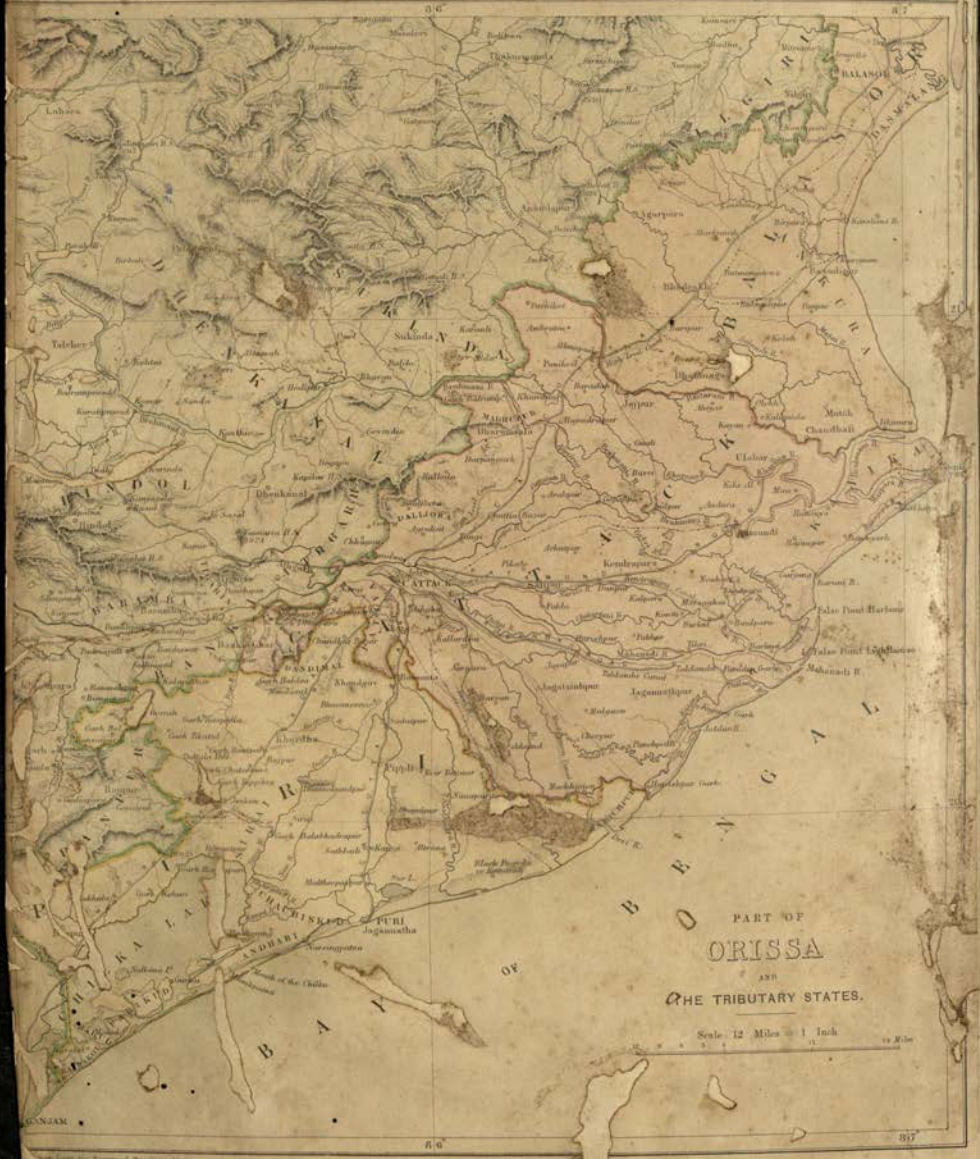

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PART FIRST.

GENERAL OBSERVATIONS ON THE ANTIQUITIES OF ORISSA.

CHAPTER I.

INDIAN ARCHITECTURE. Absence of architectural remains in India of a very remote age. Opinions of Wheeler, Fergusson, and Mrs. Manning about the antiquity of Indian Architecture. Arguments in favor of such opinions. Such arguments not conclusive. Reasons why old remains are wanting. Grecian architecture. Pillars of Aśoka; they indicate the existence of architecture before the time of Aśoka. Untenability of the Bactro-Grecian, Egyptian, Assyrian, and Persian theories. Notices of architecture in Panini, the Mahábhárata, the Rámáyana, and the Rig Veda. Wilson's opinion. Conventionalism in architecture. Tamulian origin of Indian architecture discussed. Classification. Sanskrit works on architecture.

THE ancient monuments of Orissa may be described under the two heads of Buddhist and Hindu. From what has been observed in the Introduction it may be easily inferred that the former are by far the oldest, though in extent and quality they yield to their successors. They are to be met with in tolerable preservation on the Khandagiri hills near Bhuvanes'vara, and in mutilated fragments in the districts of Cuttack and Balasore. The Hindu remains are scattered all over the province. They are of very much the same character everywhere, and the description of one group of them would, *mutatis mutandis*, suffice for all the others. It is desirable, therefore, both for the convenience of the reader, and to avoid repetition, to describe, under one general head, such parts of their details as are common to several, and to reserve their especial peculiarities for separate treatment. And inasmuch as these monuments consist principally of architectural remains, and some of the Buddhist relics rank with the oldest that have yet been met with in India, a few remarks seem necessary on the age when architecture proper was first learnt by the Indian Aryans, and the different styles it has since assumed in different parts of the country. A diversity of opinion now prevails on the subject, and, though we are not competent to restore the true historical framework, we think it would not be out of place if we noticed here the most salient points at issue, as far as our knowledge will admit of, in order that the course of future research may not be trammelled by the rut of any beaten track.

The oldest architectural remains that have come to light in India are the pillars of Aśoka, and they are not of a greater age than the middle of the third century before Christ. Hence it is, that an opinion is gaining ground that the ancient Aryans were not proficient in the art of building substantial edifices with stones, or bricks, and that the primitive Hindus were dwellers in thatched huts and mud houses, or structures equally primitive. Mr. Wheeler, in his History of India, imagines that the wall round the palace of Das'aratha was nothing more substantial than a hedge. Following this idea he supposes the palaces and fortresses described in the Mahábhárata to have been thatched structures, constructed of mats, bamboos, and mud, [illegible] nothing in the way of true masonry architecture. Depicting Hastinápur, the capital of the Kurus, he says: "A non-descript population, which may have comprised cultivators, herdsmen, mechanics, retainers, and petty shop-keepers, seem to have dwelt in an assemblage of huts, or houses, constructed of mats, bamboos, mud, or bricks, which was dignified by the name of the city. The palace was very likely built after a similar fashion, though on a larger scale, and with some pretensions to strength. Probably it was a rude quadrangular building, having men's apartments on one side, and women's apartments on the other; whilst the third side was devoted to the kitchens and household servants."* Elsewhere he fancies the central quadrangle of the palace of Das'aratha contained a thatched granary which formed the treasury.† Mr. Fergusson, the highest authority on Indian architecture, in his latest essay on the subject, says: "It cannot be too strongly insisted upon, or too often repeated, that stone architecture in India commences with the age of Aśoka, (B. C. 250). Not only have we as yet discovered no remains whatever of stone buildings anterior to his reign, but all the earliest caves, either in Behar, or in the western Ghâts, show architecture in the first stage of transition from wood to stone."‡ In his lecture on the

* History of India, Vol. I. p. 43. † Ibid. II. p. 9. ‡ Tree and Serpent Worship, p. 77.

of Indian architecture, the same author, adverting to a cave in Behar, observes: "It is a well-authenticated example of his (Dasaratha's) reign, and, though cut in the granite rock, every form, every detail, is copied from some wooden original, shewing that at the time it was executed, stone architecture was unknown in India, and men were only beginning to think of a more durable material. From that time we have hundreds of examples, in which we see the wooden forms gradually being replaced by those more appropriate to stone."* In his History of Architecture he states: "The Indians first learnt this art from the Bactrian Greeks."† Elsewhere he says: "We are not surprised to find wooden forms copied in stone in the early caves of the Buddhists about the Christian era, because we know that no stone architecture existed in India till the Greeks taught them the use of the more durable material."‡ Mrs. Manning is of opinion that this teaching commenced a little earlier. According to her, "Alexander the Great left Greek and other foreign artists in India, about the year B. C. 326;" "sculptures found in Kashmere, and coins struck in mints established on the Indus, give undoubted signs of Greek influence at dates somewhat earlier than our own era; whilst no Buddhist monument claims to be earlier than about B. C. 247."§ These assertions and opinions have derived great support from the fact of the primitive Hindu religion having been purely domestic, requiring no lordly edifice for its observance. It is not to be denied that the greatest incentives to architecture in ancient times, were the rites of religion, and respect for the memory of the dead, and temples and tombs called forth the greatest efforts of the builder. It must follow that where the dead were disposed of on the funeral pyre, and the ceremonials of religion observed by the domestic hearth, or in the courtyard of a house under the canopy of heaven, or a cloth awning,‖ sufficient attention was not likely to be directed to structures that should accommodate large numbers, or last for ages. It is also undeniable that the first attempt of man to build must have resulted in mud huts, or log cabins, retaining closely the character of the caves and excavations on the model of which they were executed, and designed, principally, if not exclusively, for the purpose of protection from the inclemencies of the weather, and the attacks of wild beasts. Then would follow the era of domesticism, when men would build cottages and houses, less for purposes of defence, more for convenience, utility and comfort. Next in order, or perhaps simultaneously, would come sacred piles and monuments for the dead, which would begin to separate architecture as a fine art from mere constructive ingenuity; and prepare the way for palaces, towers and sacred edifices, temples, sanctuaries and public buildings, structures combining the vastness, grandeur, utility, simplicity, and beauty of previous stages, and gradually leading to the perfection of the art.

But we take leave to doubt the accuracy of the conclusion that has been drawn from these general premises. The question at issue is not one of natural sequence, but of dates. Few will deny the order in which the architectural faculty of man has evolved itself, but considerable difference of opinion may exist as to the time when any one nation attained a particular stage in its course of progress. It would be foreign to the subject of this essay to discuss at length the history of architecture among the Aryans from the time they issued forth from the plateau of central Asia to people India, Persia, and diverse parts of Europe, but certain it is that one branch of them, the colonists in Greece, attained a higher pitch of excellence, if not in magnitude and therefore in majesty, but certainly in exquisite perfection of artistic beauty, elegance and taste, than the Semites, or the Turanians, ever did in any part of the world, and the argument therefore of the Aryans never having been a building race, may be rejected as gratuitous. The Grecians may have borrowed the idea of large edifices from the Egyptians, or the Pelasgians, and the most successful building tribes among them may have had some Pelasgic blood in their veins as supposed by Mr. Fergusson, but as a nation they were Aryans, and, having once got the idea, they worked it out in their own way, independently of their teachers. The Aryans who came to India had the same intellectual capacity, and it remains yet to be seen how far they utilised it in the country of their adoption. They had, it is true, no Egyptian or Pelasgic monuments at hand to excite their ambition, and their religious and funeral ceremonies were not favourable to any great efforts at architecture; but they were not altogether without some Turanian models close by them to imitate, they had some intercourse with the people of the west as far as Egypt, who were all great builders; and as a civilized race, living in a climate where the periodical rains rendered indoor life for a portion of the year, even for professed houseless hermits, an unavoidable condition of existence,¶ preceded houses and palaces, and it is not to be supposed that they always contented themselves with the most primitive dwellings of wood. "Is it at all likely," asks Mr. Sherring, "that the Aryan race existed in India for between one and two thousand years, that they conquered a large portion of the country, that they attained to greatness and glory, and made wonderful

* Lecture on Indian Architecture, p. 9.
† History of Architecture, I. p. 151.
‡ Architecture at Beejapoor, p. 87.
§ Ancient and Mediæval India, I. p. 398.
‖ This was not always the case, for we read in the Rig Veda of "spacious" (Wilson's Translation, I. 121.), and, "halls of sacrifice," (II. 220) "radiant halls," (II. 59,) and doors are ordered to be thrown open for the gods to enter (II. 72).
¶ The *Châturmâsya* Yaga of the Hindus and the *Wassa* of the Buddhists owe their origin entirely to this cause. Travelling during the monsoon rains being impracticable, the monks and hermits were allowed to dwell in houses, and there keep themselves occupied with some ceremonial or other course of discipline

progress in civilization, equalling, if not surpassing, their contemporaries in other parts of Asia, and yet, that, during all this time, they were satisfied with only transitory symbols of greatness, and never conceived the idea of leaving behind them durable monuments of their power, which should hand down their name to many generations? They must have heard of the vast structures erected in Egypt, and of the splendid palaces, and stairs, and pillars, and other edifices, with which the Assyrian monarchs adorned their cities. They were not lacking in genius, or in the desire for knowledge; on the contrary, their minds investigated the highest subjects, and whatever was of interest to humanity in general, they regarded as of importance to themselves."*

It may be said, and very justly, that no amount of *à priori* argument can be of avail against positive facts; and if it can be proved that Greek artists under Alexander, or under his successors, did teach the Indians the art of building in stone, or brick, and that no stone building had existed before that time, all disputation about it would be thrown away. But no such proof has as yet been afforded. The discussion has been carried on the premiss, taken for granted, that no Indo-Aryans could originate stone architecture, and the enquiry, therefore, has been, whence did they get the germs of the art? and, as in the minds of the disputants the idea of perfection of architecture is associated with the Greeks, and as by a strange coincidence the oldest Indian remains hitherto discovered are synchronous with the occupation of the country to the west of the Indus by the Greeks, a conclusion has been arrived at very much, as we believe, against true history. We hold that there is no proof whatever to show that the Indo-Aryans knew not stone architecture before they came in contact with the Greeks, and none, likewise, of their having learnt the art from them. We do not for a moment wish to question the fact that no authentic stone building has been met with of an age anterior to the time of As'oka, but we cannot admit that the premiss necessarily leads to the conclusion that none existed before that period, or that the Græco-Bactrian theory alone can explain the circumstances of the case. The absence of remains does not *ipso facto* imply the anterior non-existence of a thing, and what is true in other cases is equally so as regards architecture, while the disappearance of substantial proof may be attributed to many causes, social, religious, political, and physical, which it is needless here to dilate upon. Moslem fanaticism, which, after repeated incursions, reigned suprème in India for six hundred years, devastating everything Hindu, and converting every available temple, or its materials, into a masjid, or a palace, or a heap of ruins, was alone sufficient to sweep away every thing in the way of sacred buildings. To take for granted, therefore, the absence of remains as a proof of the anterior non-existence of buildings is to convert the negation of proof into a positive proof.

But is it a fact that there is no proof whatever, tangible or documentary, to show that the Indian Aryans knew and practised the art of building with stone long before the time of As'oka? The very pillars of that sovereign, we believe, afford incontestable evidence to the contrary. As'oka was born and bred a Hindu; he lived and moved amongst Hindus, and had never been beyond the boundary of Hindustan. When he changed his religion, he only gave up one form of Indian worship for another. His new teachers were likewise Indians; and few of them [illegible] seen any place beyond the Indus; for as a race they were not much given to travelling, and the missionaries who [illegible]avel were hermits who issued forth from their country to disseminate the religion of S'ákya, and not to bring [illegible] the arts of civilized life, and even if they did attempt it, as hermits, they could effect very little in that way. It was impossible for him, therefore, to bring with his new religion an art, which was, as is presumed, utterly unknown before his time, and to attain in it so high a pitch of excellence as his pillars indicate. Those pillars are monolyths forty-two feet seven inches in length, with an average diameter of two feet seven inches; most carefully shaped and polished, rounded with great accuracy, tapering from base to top in a way which implies considerable taste in pillar-making, and surmounted by sculptured capitals of muc[illegible]d beauty. Quarrying blocks nearly four feet square and forty three feet long is the most arduous occupation in whi[illegible]Hindus can be employed in the present day, and, even under European superintendence, they have but rarely proved equal to it. Certain it is that not a single block of such dimensions has been chiselled within the last fifty years in the Bengal Presidency. How is it to be supposed, that two thousand years ago, they found themselves more proficient at the very first start, without any previous training? Turning, or cutting true, such ponderous blocks into round pillars was even a more arduous and difficult task; but they acquitted themselves in it with equal success. Then [illegible] carriage of such unwieldy masses to great distances (and some of the pillars were sent hundreds of miles away from the hill-sides where they had been quarried) and setting them up at diverse and very remote places, demanded an amount of mechanical [illegible]pliance and ingenuity which could not have been imparted to the people all at once by solitary teachers. Again, the pillars were used as mere monuments erected singly in distant places to bear only ins[illegible]ptio[illegible] † and we are accordingly called upon to

* Sherring's Sacred City of the Hindus, p. 22.

† Mr. Fergusson is of opinion that the pillars were originally erected in front of templ[illegible]pes, but the Tirhut pillars, which are still in *situ*, have no [illegible] ruin of any [illegible]d in their close proximity to bear out this supposition. It is, however, poss[illegible] that [illegible] once existed in their neighbourhood, which have been since comp[illegible]y removed by [illegible] Hindus, or the Muha[illegible]dans; but the monumental char[illegible] of the [illegible] is not thereby affect[illegible] in the least.

accept as a fact that those who, until then, lived in thatched huts, and could not put even rubble stone together to make [illegible] dwellings, went against the natural order of things which require that houses should long precede monumental columns,* to the trouble and expense of putting them up merely for purposes of display and ostentation. They presuppose an extent of knowledge and practical proficiency in quarrying, carving, and ornamentation which cannot be acquired within the period of a single reign. It was, no doubt, possible for As'oka to obtain written instructions and descriptions, or the aid of artists from beyond the Indus, but it would be too much to suppose that a man, who had never seen a stone house, and was ignorant of its use, would send to a distant country for quarriers, masons, and sculptors.

Supposing, however, for the sake of argument, that he did send for, or somehow get, the aid of foreign artists, he could obtain it from one of four nations, *viz.*, Greeks, Persians, Assyrians, or Egyptians. Now, of the Greeks in connexion with India, authentic history for our purpose here begins with the invasion of Alexander; but there is nothing to show that Alexander himself did much in the way of architecture on this side of the Indus, besides erecting a few altars, and building two cities, one to the memory of his favourite horse Bucephalus, and the other to that of his pet dog Peritas, and History is silent as to the nature of those cities, and the nationality of their architects; Mrs. Manning says, "he left behind him Greek and foreign artists," but we know not on what authority this statement has been made. Looking to the recent British expedition to Abyssinia no one would assume that he invaded India with any large number of architects and workmen, to leave some of them behind in the country to lay the foundation of Indian architecture. The total period of his sojourn in India extended to only a few months, the greater part of which was devoted to marching from place to place, his stay at any one spot not exceeding a few days, and that under circumstances of military pomp and array which could not possibly afford any opportunity to the conservative Hindus to see and appreciate enough of Grecian civilization to imitate it. Of his Indian dominion Calanus, the gymnosophist, presented to him an excellent image. "He laid," says Plutarch, "a dry and shrivelled hide before him, and first trod upon the edges of it. This he did all round; and as he trod on one side, it started up on the other; at last, he fixed his feet on the middle, and then it lay still. By this emblem he showed him, that he should fix his residence, and plant his principal force, in the heart of his empire, and not wander to the extremities."† His Grecian successors in India were neither of sufficient importance, nor did they hold any part of the country sufficiently long, to be the leaders of taste and fashion to such a potentate as As'oka. They had then occupied only for a short time an edge of the dry leather, the border land of the North West, and for all practical purposes do not appear to have exercised much influence on Indian civilized life. To judge of the past from the present, let us take the English nation in India. It has held India for a longer period than the Greeks did Bactria from the time of Alexander to that of As'oka, but yet it has produced no appreciable effect on the architecture of its neighbours. The Bhutanese and the Sikimites have not yet borrowed a single English moulding. The Nepalese, under the administration of Sir Jung Bahadur, are not a whit behind-hand of As'oka and his people; Sir Jung went to Europe, which As'oka never did; still there is no change perceptible in Nepalese architecture indicative of a European amalgamation. The Kashmiris and the Afghans have proved equally conservative, and so have the Burmese. But to turn from their neighbours to the people of Hindust[illegible] these have had intimate intercourse with Europeans now for over three hundred years, and enjoyed the blessings of Engli[illegible] for over a century, and yet they have not produced a single temple built in the Saxon, or any other European style. Th[illegible] conclusion we are called upon to accept is that what has not been accomplished by the intimate intercourse of three cent[illegible]es, and the absolute sovereignty of a century, in these days of railways, and electric telegraphs, and mass education, was effected by the Greeks two thousand years ago simply by living as distant neighbours for eighty years or so. Doubtless private speculators, coming in search of work, could afford a supply of architects to As'oka even when he would not send for any; but no more would architects and masons go to a place for work where stone and brick houses were u[illegible] therefore not in demand, than Rosa Bonheur or Landseer think of opening a studio in the capital of Dahomey.

Admitting, however, that As'oka‡ did somehow get a few master workmen from Greece, or from the Bactrian Greeks, we would ask, would not such people, in the total absence of an indigenous style, reproduce the forms they were most familiar with? There can be only one answer to such a question; but the pillars shew that they are perfectly independent of Greek [illegible] of the 3rd, 4th, and the 5th centuries, B. C. We find in them nothing of the Doric, Ionic, or Corinthian columns—nothing to recall to mind the genius of the great masters of architecture and sculpture. Their proportion, their bases, and their ornamentation are all different, and characteristic of an original style, and a style which must have taken centuries before it [illegible] brought to the state of perfection in which we find [illegible] in the time of As'oka.

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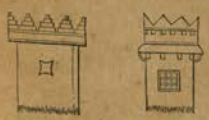
* Cromlechs, and stone circles, [illegible] [illegible]alithi[illegible] remains are perhaps exce[illegible], but they cann[illegible] fairly be [illegible] under th[illegible] head of architectural monu[illegible]ts. They were never [illegible] of dressed st[illegible].

† [illegible]nghorne's [illegible] on 1828, [illegible]91.

‡ As'oka is said to have built 84,000 stupas in different parts of India. This is no doubt an exaggeration, but there can be no question that he erected a great many, for a good number of them were in existe[illegible] the time of Fa Hian and Hiouen Thsang from 7 to 9 centuries afte[illegible] time.

The last argument applies equally to the Egyptians. The characteristics of Indian architecture of the first three centuries before the Christian era as preserved in the pillars of Aśoka, the caves of Khaṇḍagiri and Behar, and the bas-reliefs of Sánchi, bear no evidence whatever of their being of Egyptian origin. The pilasters, doorways, cornices, brackets, and mouldings of the time were totally different, and cannot by any stretch of imagination be approximated to the land of the Pharaohs. Professor W. H. Hoskings, the author of the article on architecture in the *Encyclopædia Britannica*, is of opinion that "in its leading forms and more obvious features, Hindu architecture strongly resembles Egyptian, and may be considered as of the same family with it." (III. p. 434). But the authority of Mr. Fergusson on this subject is of far greater importance, and it is decidedly against the supposition. No one, who has seen drawings of ancient Indian buildings, and has placed them beside the magnificent illustrations of the *Description de l'Egypte* will for a moment entertain the smallest suspicion on the subject.*

The same may be said of Assyria and Persia, but with some reservations. The conical battlements of Assyrian towers are reproduced in a few of the bas-reliefs of Sánchi, and the triple-step battlements of the palaces of Assyria occur in some bas-reliefs of Khaṇḍagiri and Sánchi; on several towers at the latter place a fourth step is added to the battlements as shown on the margin; but both these features are so simple that they cannot be taken as worth any thing as tests. Two ashlers put slanting towards each other, produce a triangular figure, and three ashlers of different sizes put one upon another, produce the other; and children, playing with German toy bricks, produce them without any great effort of the inventive faculty. This remark would apply to the chevron and the cross-lined check mouldings, (Figs. 3 and 4); as also to the beading round the necks of Aśoka's pillars, for no ornament suggests itself more readily than a band of beads round



Figs. 1-2. Towers from Sánchi.

Fig. 3. Check moulding from Assyria.

Fig. 4. Chevron moulding from Assyria.

Fig. 5. Interlacing circular moulding from Assyria.

Fig. 6. Patera from Assyria.

the neck. The interlacing circular moulding observable in Assyrian architecture (Fig. 5) occurs repeatedly on the temple of Bhuvanes'vara, but the nature of the ornament is not such as to warrant any conclusion as to its origin. A wavy line is a figure which results almost instinctively when a pencil is at play in the hand of a boy, and another to interlace it requires but very little exertion of the imagination. Some of the pateras also are similar (Fig. 6); but the similitude is such as must result from the attempt of any primitive nation to delineate flowers by ranging four or more petals round a central dot. Certain it is that all these patterns may be seen very neatly carved on the hafts of hatchets from Polynesia where Assyrian art influence could not have been other than *nil*. The drooping foliations of the capitals are more complicated; and they certainly belong in common both to the Aśoka and Assyrian pillars. To an Indian they appear very like the pendant filaments of the lotus when the petals have been removed from the receptacle, or the reverted petals of a lotus bud; forms which are peculiarly ornamental and beautiful, and which have been employed in India as ornaments in a variety of ways, and in different places. It would not be safe, therefore, to take them as conclusive. The so-called honey-suckle and lotus ornament, which is common both to the Aśoka pillars and Assyria, might not at first sight appear to be so readily disposed off. With the people of this country the upright buds may well pass for spikenards, or flowers of the turmeric, or the spathes of the Nílakantha, a beautiful deep purple flowering plant of the zingiber tribe quite common in India, and the open petaled flower with buds, the Muchukunda (*Pterospermum*); the uprights are as unlike lotus buds or half blown flowers as they well can be, and the intermediate buds with four do not at all like honey-suckle buds: we take the open petals to be bunches of slender leaves tied together. But whatever they be, they are so peculiar that an imitation on the one side or the other may be readily assumed, and if this be assumed the whole capital, and even the battlements and the mouldings, might be taken to be Assyrian, though logically we cannot admit that the cumulative effect of a number of individually weak and scarcely tenable arguments, is conclusive by any means: the imposing chain of circumstantial evidence, which in sensational novels plays so exciting a part, invariably breaks down under the first stroke of the hammer of truth. But even admitting to the full extent their force, the similitudes do not by any means suffice to settle the date of Indian stone architecture—much less to affiliate it to the Grecians of Bactria. The relation of the Indo-Aryans with Assyrians, dates from a much earlier epoch than B. C. 250, and it is possible, though in the absence of proof not very probable, that the two nations did borrow from each other many elements and re-

* The Satigarbha caves of Das'aratha have doors with sloping sides in the Egyptian style, but they are quite exceptional, and their counterparts have no where else been met with in India.

quirements of civilization; but no deductions about the age of Indian architecture from the similitude of particular ornam[illegible] can be reasonable or safe. Of course, if it could be established beyond a doubt that the Indo-Aryans had no stone architecture of their own down to a particular period, and that that period was later than the time when they came in contact with the Assyrians, it could be argued that they had taken the art from the latter; but in such a case it would be natural to expect that the early Indian style should bear a close resemblance to the Assyrian. It is to be regretted that sufficient materials are not at hand for a thorough comparison of the styles of the two nations; but from what we have, it is clear that one of them is not a copy of the other. Most of the doors of Assyrian palaces and of some of their fortresses were rounded on the top; but none were so in India. Indian upper roofs were mostly slanting, or curvilinear; those of Assyria flat. The cornices of the two were alike, and supported on corbels; but their styles were entirely different. The pilasters and pillars as seen at Khaṇḍagiri and in the Sánchi bas-reliefs, are, likewise, different from anything of the kind figured by Layard, Botta, or Fergusson. The verandas and balconies shown in Indian bas-reliefs have not their counterparts in Assyria; and the pointed horse-shoe pediments which formerly surmounted Indian buildings, and were so peculiarly characteristic, are absent in Assyrian and Persian buildings. To make this clear we place on the margin the figure of an Indian stronghold taken from the Sánchi bas-reliefs,* (Fig. 8), beside one from Layard's Nineveh,† (Fig. 7) and a glance at them will, we believe, demonstrate that their styles are independent of each other; at any rate their resemblances, whatever they are, are by no means such as to warrant the deduction of one of them being in any way related to the other. Plates 25, 30, 31, 33, 34, 35 and 38, of the "Tree and Serpent Worship," also offer very remarkable specimens of Indian buildings for comparison with the palaces of Khorsabad, Koyunjik, and Persepolis, as delineated in Layard's illustrations of Nineveh buildings, and Mr. Fergusson's woodcuts of ancient Persian palaces. The flying arch shown in the front of the Khorsabad Palace,‡ may be compared, and indeed bears a close resemblance, to similar members of mediæval Jain temples, but we scarcely think that, on the strength of the similitude, any body would venture to draw a definite conclusion regarding the genesis of Indian architecture. Nothing of this flying arch is noticeable in Indian buildings of the time of As'oka, and of his successors for two centuries. Under any circumstance the resemblances are by no means so close as to justify the supposition that the Indian specimens are the handi-works of trans-Indian architects entirely unaffected by other and indigenous influence; for it would be absurd to suppose that the Assyrians in India erected edifices altogether after wooden models, while in their own country the public buildings were, to a large extent, of st[illegible] If it be assumed that the architects were natives, wh[illegible] learnt the principles of their art chiefly from Assy[illegible] Persia, or from a common source, it would be equally st[illegible]nge that they should have perpetuated the construction of wooden models in India for centuries after they had seen better and more artistic designs with their tutors.

Fig. 7. Fort from Assyria.

Fig. 8. Stronghold from Sanchi.

A careful survey of these facts leads us to the inevitable conclusion that quarriers, m[illegible]lptors existed in the country long before the periods fixed by the learned author of the "History of Architecture," [illegible] Mrs. Manning respectively, and that there likewise existed stone and brick edifices of some kind or other, and which, to judge from existing remains, were unlike any Greek, Egyptian or Assyrian building that we are acquainted with. For ought we know there may have been a time when the Indians copied from the Assyrians, but it was at such a remote period in history that nothing precise can be said about it.

Nor are documentary evidences wanting to support this conclusion. In the Grammar of Páṇini, which was composed, according to Dr. Goldstucker, between the 9th and the 11th centuries before Christ,§ we find the derivations given of such words as *ishṭaka* (bricks), *stambha* (pillars), *bháskara* (sculptors), *aṭṭáliká* (buildings), &c., and they cannot but imply the existence of brick and st[illegible]e bu[illegible]dings at the time and for some time previously.

* Tree and Serpent Worship, [illegible]
† Layard's Nineveh [illegible]
‡ History of Ar[illegible] woodcut 6[illegible]

§ Professor Max Müller brings down the age of the grammar to the 6th century B. C., which of itself is at least three centuries anterior to the limit fixed by Mr. Fergusson for the origin of Indian architecture.

The ages of the Rámáyana and the Mahábhárata have not yet been satisfactorily settled; but it is admitted on almost all hands, that those works existed long before the reign of Asóka, very probably from before the date of Buddha himself, and they abound in descriptions of temples, two-storied buildings, balconies, porticos, triumphal arches, enclosing walls, flights of stone masonry steps in tanks, and a variety of other structures all indicative of a flourishing architecture in the country. The great concourse of crowned heads which assembled at Indraprastha, on the occasion of Yudhisthira's royal feast, the Rájasuya, needed a great number of houses for its accomodation, and the poet thus describes the lodgings assigned to the guests: "O king, these and many other princes of the middle country (central India?) came to the great ceremonial, Rájasuya, of the sons of Pándu. By order of the virtuous monarch, to them were assigned dwellings replete with refreshments of every kind, and having by them charming lakes, and ranges of ornamental plants. The son of Dharma welcomed them in due form. After the reception, the princes repaired to the several houses assigned for their accomodation. Those houses were lofty as the peaks of the Kailása mountain, most charming in appearance, and provided with excellent furniture. They were surrounded on all sides by well-built high walls of a white colour. The windows were protected by golden lattices, and decorated with a profusion of jewellery. The stairs were easy of ascent; the rooms were furnished with commodious (*lit.* large) seats, and clothing, and garlands; and the whole was redolent with the perfume of the finest agallochum. The houses were white as the goose, bright as the moon, and looked most picturesque even from a distance of four miles. They were free from obstructions, provided with doors of uniform height, but of various quality, and inlaid with numerous metal ornaments, even as the peak of the Himálaya. The princes were refreshed by the very sight of those mansions."*

In the story of Nala allusion is made to a lofty balcony from which men were seen from a great distance; and in the Rámáyana, the mischievous harridan, Manthará, looks out from an upper window of the palace to notice the rejoicings of the people in the street on the nomination of Ráma to the Vice-kingship of Kosala. The description of the metropolis of Ayodhyá is even more remarkable, and may be noticed as containing unmistakable proofs of the existence of stone, or brick, houses in Aryan India, at the time when that work was composed. It occurs in the 5th canto of the first book from which the following extract is taken. "On the banks of the Sarayu there was a great country named Kosala: it was happy and prosperous; and abounded in cattle, grain, and riches. In that country was the renowned city of Ayodhyá which had been of yore built by Manu, the lord of mankind. That great and magnificent city was twelve yojanas in length, and three in breadth, and included nine sub-divisions. Its principal gates, placed at proper intervals, were large and lofty, and its thoroughfares broad; it was embellished with numerous highways, the dust on which was always allayed with showers of water. And there were crowds of merchants, and a profusion of jewels; as also many large mansions, fortified places (*durga*), and pleasant gardens. It was surrounded by a deep and unassailable moat, and contained an immensity of arms of various kinds. Its arched gateway (*toraṇa*) was provided with doors, and always guarded by numerous bodies of archers. The noble king, Dasaratha, who advanced the prosperity of the country, protected that city as his own, even as Indra protects his capital. The high roads of the city were provided with strong gateways, and its market-places were well arranged and regularly disposed. There were in it lots of instruments, and arms, and numerous works of art. There were arms which could kill a hundred [illegible] at a time (*sataghni* centicide, a primitive mittrailleuse, generally supposed to have been a kind of rocket,) and mighty clubs mounted with iron blades, and flags were flying over its triumphal gateways. There were also horses, and elephants, and war-chariots, and conveyances of various kinds. Ambassadors and travellers paced its streets, the sides of which were embellished by the wares of merchants and traders. The temples (*devágṛiha*) in this city were as resplendent as the sky. Its assembly-halls, gardens, and alms-houses (*prapá*, *lit.*" where water is distributed gratis) were most elegant; and everywhere were arranged ex[illegible]gs crowded with men and women, with learned men, and seniors wise as the Devas. The houses were as mines of ge[illegible] and the abodes of the goddess of fortune. The steeples of the houses were as resplendent as the crests of mountains, and bore hundreds of pavilions, like the celestial palace of the chief among the Devas. The rooms were full of riches and corn, exquisitely gilt and decorated, and seemed as charming as pictures; and they were so arranged

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* ते चान्ये च बहवो राजानो मध्यदेशजाः ।
आजग्मुः पाण्डुपुत्रस्य राज्ञस्तं सत्रमाव्रतुम् ।
दद्रुस्तेषामवसथान् धर्मराजस्य शासनात् ।
शुभ्रप्रासादसंबाधान् शंकरालयसन्निभान् ।
सभाः सर्वगुणोपेताः पूर्णा यत्रे तत्र सर्वशः ।
शयनानि महार्हाणि अन्नपानवतां तथा ।
वेश्मभिस्तैरुपारूढान् मनोज्ञान् रत्नभूषितान् ।
धर्मराजः संशतानि प्रत्यगृह्णात् सुहृत्तः स्थितः ।

सुवर्णजालसंनीतान् मणिकुट्टिमभूषितान् ।
शुक्लाम्बरपरीधानान् अनवद्यवरस्त्रियः ।
सदानसमवच्छन्नान् समाजमभितः ।
पुण्यघोषाभिगीतांश्च शुश्राव मधुरस्वनान् ।
[illegible]राणां [illegible]रान् पुरुषाग्र्यान्नरर्षभः ।
[illegible]
विप्राणां [illegible]

Mahábharata, B[illegible] Ms. [illegible] Edition I. p. [illegible]

that men could pass from one room to another without perceiving any inequality (in the floor), while the dulcet sound of enchanting music proceeding from the *mridanga*, and the flute, and the *vina*, filled every place."*

The words *torana* "arched gateways," *harmya* "masonry houses," *devâyatana* "temples," *sabhá* "assembly hall," *prâsâda* "palaces," *sikhara* "steeples," and *vimâna*† "pavilions" in the above extract are noteworthy. None of them can consistently be applied to huts and thatched houses, for which the poet invariably uses different words. Prurient fancy may extol and exaggerate, but it never suffices to create names of material objects which the fanciful have never seen or heard of;—a Ruskin may amuse himself and his readers by building an imaginary palace in the air for the habitation of an imaginary queen of the air,‡ but his ideas are always of the earth, earthy, taken from material objects with which he is familiar. Mr. Wheeler has given a translation of this passage in his History of India, but, like the version of the Mahábhárata above noticed, it is corrupt and quite unreliable. Commenting on it, he says, "His (the Maháráját's) palace was magnificent and resplendent, but in describing the walls, the Brahminical bard has indulged in a simile which furnishes a glimpse of the reality. They were so tall that the birds could not fly over them, and so strong that no beast could force its way through them. From this, it is evident that the walls could not have been made of brick or stone; for in that case the attempt of a beast to force his way through them, would never have entered the mind of the bard. In all possibility, the palace was surrounded by a hedge, which was sufficiently strong to keep out wild beasts, or stray cattle."§ Unfortunately for this commentary, the text is entirely imaginary. We have examined five different editions of the Rámáyana, including those of Gorresio, and Carey, and eight MSS., but we have nowhere met with any passage that would give the idea of a tall wall, which the birds of the air could not fly over, or the beasts of the field could not force through. "Bees flying away from white lotuses, like brides from their husbands," "ducks and geese swimming in tanks," "brilliant kingfishers," "plantain trees round the tanks bending with the weight of the fruit, like reverential pupils bowing at the feet of their preceptors," and other objects prominently noticed by Mr. Wheeler, have likewise no place in the original; and it is unnecessary, therefore, to refute the deductions that have been drawn from them. Probably the whole of the historian's extracts are taken from the Bengali version of Kírtivása written about three hundred years ago, and utterly unworthy of critical notice. Adverting to treasures, he says, "the treasures, which probably contained the land revenue of rice and other grains, were placed for security within the enclosure," apparently disbelieving the possibility of any metallic wealth. The word in the original *dhana*, however, leaves no option in the matter, and seeing that in the time of the Rig Veda frequent mention was made of pieces of gold of a fixed weight and specific name, *nishka*,‖ which were reckoned by hundreds, and presented to Bráhmans and beggars on festive and other occasions; that the nuptial present made to Sitá, included "a whole measure of gold pieces and a vast quantity of the same precious metal in ingots;" that "Das'aratha gave a full *ayuta* (ten thousand pieces) of gold, and a quantity of unwrought gold to the value of an *ayuta*"; and that descriptions

* This passage appears in Mr. Wheeler's History of India, (Vol. I. p. 165), in a very different garb, quite unlike what we meet with in the original. The word *avasatha* "a house," is rendered by "a pavilion," which conveys the idea of a tent, or a temporary structure, and makes the whole description inconsistent, and at times absurd. In fact his extracts are generally taken from corrupt translations, and are not at all reliable. For purposes of critical enquiry they are utterly worthless. Vide Proceedings, Asiatic Society Bengal, for 1868, p. 44.

† विमानोत्क्षीटवर्णानि भग्नभूमौ च सङ्गनि ।

‡ The Queen of the Air, by John Ruskin, 1869.

§ The History of India, II. 8.

‖ I, Kakshivat, "unhesitatingly, accepted a hundred nishkas, a hundred vigorous steeds, and a hundred bulls." Wilson's Rig Veda, II. 17. Again, "May he (the Rájá) be rich in kine, in gold, in horses." According to Manu, a nishka was a weight of gold equal to four suvarnas (VII. 134). In the Amarakosha, it is put down at 108 suvarnas. That it was a currency, if not coined money, admits of no doubt. In the Paripâsa, goods are said to have been exchanged for the native money, *deséyam vámyam*, and the Hindu gold coinage is termed *sóAna*. Yáska, in his Nirukta (p. 13), quotes from the Vedas, eighteen different words, which convey the abstract idea of wealth, without naming grain, or cattle, or any other specific object.

Rámáyana, B. I. C. V.

given of presents of from ten to twenty crores* it would be a perversion of truth to assert that in the age of Das'aratha, there was no more convenient form of wealth accessible to Indian princes than corn, and that their treasuries were nothing better than granaries. It is scarcely likely that all these proceeded from the imagination of poets, and had no substratum whatever of truth.

At a much earlier age, Yáska, in his Nirukta (p. 18), quoted twenty-two different words from the Vedas, as the synonyms for houses, including several words which can be used for masonry houses only.

At a still earlier age the authors of the Rig Vedahymns appear not to have been ignorant of stone forts, walled cities, stone houses, carved stones, and brick edifices. Cities *(puras)*, as distinct from villages *(grámas)*, were well known, and chiefs have been described as owning a hundred cities.† Agni is invoked in one place to be a means of "protection for the posterity of his worshippers like unto the vast, spacious iron-walled cities of the Asuras."‡ In several other places he is called "the destroyer of [illegible]." Indra is likewise "a destroyer of cities."§ He is said to have "quickly demolished the strongholds and seven-walled cities of Srukta and other Asuras."‖ He overthrew ninety and nine cities of some Dasyu, and "occupied the hundredth as a place of abode." In one place he has ascribed to him the credit of demolishing "a hundred cities of stone for the pious Divodása."¶ Elsewhere he "demolished 90 cities for the same person,"* and again "99 cities."† He destroyed the "perennial cities" of the Asuras, and "humiliated their defenders;"‡ he "humbled the people, suing for pardon, and destroyed their seven new cities,"§ as also "the hostile and undivine cities of the Asuras," and broke down their "artificial defences."‖ Again he possessed "all the cities of the Asuras as a husband his wives."¶ Sarasvatí is described "as firm as a city made of iron."* Mitra and Varuna are invoked to grant "an unassailable dwelling that may be a secure shelter."† Iron cities are also mentioned in several other places,‡ figuratively, no doubt, to express great strength, but not without conveying an idea of the writer's knowledge of something more substantial than wattle and mud. In the first *Mandala* (Sukta CXII. 7) Atri is described to have been "thrown into a machine room with a hundred doors where he was roasted."§ Vasishtha, in a hymn to Paryanya, longs to have "a three-storied dwelling" *(tridhátu Sarańam)*.‖ Dr. Muir notices the mention of cities which had a hundred enclosures or fortifications *(satabhuji)*, and is of opinion that, "although they are alluded to as figurative expressions of the means of protection afforded by the gods, they no doubt suggest the idea of forts, consisting apparently of a series of concentric walls, as actually existing in the country at the time."¶ In the second Mandala, sovereigns are described "who, exercising no oppression, sit down in this substantial and elegant hall built with a thousand columns,"* and dwellings with such halls are said to be "vast, comprehensive, and thousand-doored."† Commenting on these passages, Dr. Muir justly observes that "these are but exaggerated descriptions of a royal residence, such as the poets had seen."‡ Pillars, spacious doors, and windows, though frequently mentioned, are not decisive intimations of the existence of masonry buildings; but bricks could not possibly have originated unless required for such structures; for it would be absurd to suppose that bricks were known and made, and yet they were never used in the construction of houses. Commenting on the state of civilization among the Hindus at the Vedic period, as apparent in the third volume of his translation of the Rig Veda Sańhitá, the late Professor Wilson remarked:—

"Cities are repeatedly mentioned, and although, as the objects of Indra's hostility, they may be considered as cities in the clouds, the residences of the *Asuras*, yet the notion of such exaggerations of any class of beings could alone have been suggested by actual observations, and the idea of cities in heaven could have been derived only from familiarity with similar assemblages upon earth; but, as above intimated, it is probable that by Asuras we are to understand, at least occasionally, the anti-vaidik [illegible] of India, and theirs were the cities destroyed. It is also to be observed, that the cities are destroyed on behalf or in defence of [illegible]inces, who could scarcely have beleaguered celestial towns, even with Indra's assistance. Indeed, in one instance (p. 173), it is said that, having destroyed ninety and nine out of the hundred cities of the *Asura*, Sambara, Indra left the hundredth habitable for his protégé Divodása, a terrestrial monarch, to whom a metropolis in the firmament would have been of questionable advantage.

* Carey's Rámáyana, II. 114.
† Wilson's Rig Veda, I. 147.
‡ Ibid IV. 5.
§ Ibid II. 36.
‖ Ibid IV. 59.
¶ Ibid IV. 30, 20.
* Ibid II. 34.
† Ibid II. 256.
‡ Ibid II. 38.
§ Ibid II. 166.
‖ Ibid II. [illegible]247.
¶ Ibid IV. 75.
* Ibid IV. 189.
† Ibid IV. 12.
‡ R. V. Mandala I. 58, 8, II. 20, 8, IV. 27, VII. 3, 7, V[illegible] 95, 1, VIII. 89, 8, X. 101, 8.
§ Ibid IV. 148.
‖ Ibid IV. 30.
¶ Sanskrit T[illegible], V.
* Wilson's Rig [illegible]da, II.
† Ibid IV. 179.
‡ Sanskrit Texts, V.

"That the cities of those days consisted, to a great extent, of mud and mat hovels is very possible: they do so [illegible] Benares, Agra, Delhi, even Calcutta, present numerous constructions of the very humblest class; but that they consisted of those exclusively, is contradicted in several places. In one passage (p. 180) the cities of Sambara that have been overturned, are said to have consisted of stone; in another (p. 470) the same cities are indicated by the appellative *dehgah*, the plastered, intimating the use of lime, mortar or stucco; in another we have specified a structure with a thousand columns, which, whether a palace or a temple, must have been something very different from a cottage; and again, (p. 288) supplication is put up for a large habitation which could not be intended for a hut: cities with buildings of some pretence must obviously have been no rarities to the authors of the hymns of the Rig Veda."*

To controvert these documentary proofs and arguments, the only fact of any moment that has yet been advanced is that [illegible] architecture in the first and second centuries before Christ shows evident signs of a transition from wood to stone, which could not have been the case had it existed and flourished from many centuries before it. It may at once be conceded that the caves of Behar and of the Western Ghats bear indications of their having been formed after wooden models. The same is, however, not the case with the excavations in Orissa. Were it otherwise, still the fact would not, we contend, necessarily imply that those caves indicate the first stage of transition from wood to stone. It is not to be denied that masonry houses must have followed huts and wooden structures, and the peculiarities of the latter must necessarily, therefore, be traceable in the former; but those peculiarities do not, by themselves, suffice to indicate the exact age when the transition from wood to stone first took place. There is a spirit of conservatism, a mannerism, or a survival of custom, in architectural ornamentation so strong that it preserves intact forms long after the lapse of the exigencies which first led to their production. Many peculiarities in European architecture, even of this century, such as the Grecian triglyphs and mutules, avowedly the counterparts of wooden models, may be ascribed to this cause; and in India such indications may be met with without number both in Hindu and in Muhammadan edifices of the last two centuries. In the fort at Agra may be seen, by the sides of the marble hall of the Dewán Khás, two small pavilions of white marble with curvilinear roofs formed entirely after the model of thatched huts. They are repeated in the palace of Sháh Jehán at Delhi, and likewise at Futtehpur Sikri and other Muhammadan cities. Slightly modified they may be seen also on the palace at Bharatpur, and on other Hindu buildings. Until the end of the last century, a common form of temple for Káli in Bengal was a quadrangular oblong room with two sloping curvilinear roofs, with gable ends in exact imitation of the commonest kind of hut known in the country. One of the kind still exists in Calcutta, close by the Nabaratna in Sobhábázár, and we have seen several at Chandernagar and elsewhere. Such structures bear the same name, *bánglá*, which is given to the huts of which they are counterparts, and in their details leave out nothing which can be easily imitated in brick, or stucco. Few, however, we fancy, would venture to appeal to them as evidences of a recent transition from wood to brick in Agra, Delhi, or Bengal.

Mr. Fergusson is startled to find at Bijapur, some fifteen centuries after the Christian era, "a recurrence to the same principle. The balconies with their hoods, and the brackets which support these, are the principal ornaments in the four [illegible] of this little monument" *(Mehtári Mahal)*, "yet every part of their construction, every detail of their ornament, is evidently copied from a wooden original. We find the same balconies used at the present day; and in any city between Benares and Boorhanpur similar objects might be found with almost identical details, but always constructed in wood. From the remains of Hindu temples we know that stone architecture did exist in the Deccan for centuries before Beejapoor was founded [illegible] account for this anomaly the learned author continues: "It is clear, however, that the Moslims [illegible] had very little experience in building in stone when this work was undertaken, and as little knowledge of [illegible] style as then practised at Agra and Delhi. They must also have been actuated by a wonderful aversion to anything savouring of Hinduism, when they designed a building so original as this, and one so manifestly unlike anything to be found in the country in which they had settled."‡ Bearing in mind, however, that the Moslim population of the south was formed of a miscellaneous collection of foreigners, Pathans, Moghals, Abyssinians, and others, the bulk proceeding from the north; that everywhere these men [illegible] Hindu buildings and temples to serve as mosques; and that the founder of the Bahminy dynasty, Allauddin Hussan, [illegible] D.) was a native of Delhi who expelled the Emperor Muhammad Tughlak from Dowlatabad where he had [illegible] capital of the Pathan empire, it is difficult to believe they were so perfectly ignorant of stone architecture as [illegible] city of copying from wood, and still more difficult to suppose that those who built the largest dome on [illegible] A. D. [illegible] er one than that of St. Peter at Rome, had, three reigns anteriorly, between 1550 [illegible] ing in stone, as to copy from wood, and that at a time when the intercourse between

[illegible] p. XIV. † Architecture at Beejapoor, p. 87. ‡ Loc. cit.

th and the south, was perfectly uninterrupted for considerably over three centuries. We believe survival of custom exerted a much more potent influence in such cases than ignorance. Adverting to the caves of Kennari, at Salsette, Mr. Fergusson observes: "Although the style begins in wood and ends in stone, it is not a little startling to find so little change either in the plan, or general disposition of these caves, during the ten centuries through which we can certainly trace them,"* and to account for the peculiarity he adds, "The cave at Kennari, or the last at Ajunta, is practically identical with that at Karli, in so far as its general plan and design is concerned, and even the last retains so strongly a reminiscence of its wooden origin, that we have little reason to doubt, that the practice of erecting such halls in that perishable material was continued contemporaneously."† This solution of the difficulty, however, is by no means favourable to the position assumed by the author, that architecture in India must have commenced after the invasion of Alexander, (250 B. C.,) because all the earliest specimens show traces of their wooden origin. If those traces are visible in stone structures raised twelve centuries afterwards, and may be accounted for by the assumption of imitation from contemporaneous structures, the argument would lose little of its force when applied to the erections and excavations of the time of Aśoka, and of his immediate successors. Wooden houses have existed at all times, and exist to this day; but they afford no reason to suppose that races who have known stone houses for a thousand years, in copying wooden features in stone, do so directly from wood, and not from stone which has preserved those features from generation to generation in a country, like India, where custom has exercised the most despotic sway, and held the mind of man in such abject slavery.

The question may be here raised as to how far the ancient Aryans were indebted to the Tamulians for their knowledge of stone architecture? On the one hand, the extracts from the Rig Veda given above, show clearly that the walled cities which excited the cupidity and envy of the Aryans, were mostly owned by the aboriginal Asuras; and there is not quite as much said of lordly edifices constructed by the Aryans themselves. At a later date, Vyása, in the Mahábhárata, acknowledges that the great palace of Yudhisthira was built by a Dánava, Maya by name, who had been overcome by Arjuna in battle; and an admission like this, in a work designed exclusively to extol the greatness of the Aryan race, is of considerable importance. An abstract of a work by this Dánava is still extant. Further, the remains of Tamulian architecture existing in the present day, are more voluminous, more extensive, and more elaborate than Aryan remains. And all these tend to show the superiority of the Tamulians in architecture, and the likelihood of their having been the first teachers in the art to the Aryans. On the other hand, the oldest Indian specimens of the art are not Tamulian, but Buddhist; and they do not bear a close family resemblance to the Tamulian specimens now available; and the relative positions of the Aryans and Tamulians in the scale of civilization were such as not by any means to warrant the assumption that the latter were the teachers and the former the taught, in so essential a civilizing art as architecture. The Rig Veda does not profess to treat of the comparative status of architecture among the Asuras and the Aryans, but to glorify the latter by showing how they overcame mighty enemies,—a feeling which has, even in modern times, very largely coloured the despatches of great commanders in the field of battle. The employment of Maya as an architect may be, likewise, due to a similar feeling, proving how complete was his subjugation. Besides, all the mediæval Tamulian temples are sanctuaries for divinities borrowed from the Vedas, and it is natural to suppose that the temples have followed the images from the same source, even as Native Christian Churches in India, in the present day, follow the order of architecture with which Christianity is associated by the proselytes, and prayers are held most appropriate under Saxon or Italian towers and steeples. On the whole, as little is known of ancient Tamulian art as distinct from Aryan, that no satisfactory conclusion can be arrived at under this head.

But whatever the origin of the age of ancient Indian architecture, looking to it as a whole it appears perfectly self-evolved, self-contained, and independent of all extraneous admixture. It has its peculiar rules, its proportions, its particular features,—all bearing impress of a style that has grown from within,—a style which expresses in itself what the people, for whom, and by whom, it was designed, thought, and felt, and meant, and not what was supplied to them by aliens in creed, colour and race. A few insignificant ornaments apart, its merits and its defects are all its own, and the different forms it has assumed in different provinces are all modifications, or adaptations to local circumstances, of one primitive idea. It must therefore, be treated by itself without reference to foreign art.

Most of the oldest remains now accessible, are, as already stated, Buddhist, and they are all monumental in their character, either tumuli over the remains of the dead, or pillars and inscriptions bearing royal mandates. Aśoka is said to have built innumerable temples; but no unquestionably authentic remains thereof are now to be met with. The [illegible], which are

* Loc. cit. † History of Architecture, I. p. 491

likewise of Buddhist origin, afford examples of the style of dwellings common during the second and the third centuries [illegible] the Christian era, and probably for some time earlier; but they include no structures that may be strictly called temples. The Behar caves, however, which are of a somewhat later age, have halls with an apse at one end enclosing a chaitya, and designed expressly for public worship. Some of the oldest caves of Western India improved upon this idea, and produced more ostentatious places for the purpose. Leaving them aside, and generalising upon built temples, and temples only, we find the Buddhá-gayá and the Nálandá Buddhist temples so closely similar to Hindu structures of the same class that their style may be very strictly described as common to both the Hindus and the followers of S'ákya on this side of the Nurbudda, and be appropriately designated, the Indo-Aryan, or Northern Indian. But as it took a wide range under the Buddhists, and assumed very diverse forms in different parts of India, as also in Burmah, Ceylon and Java, Mr. Fergusson has made two distinct classes of it, separating the purely Hin[illegible]ms of the class under the head of Northern Hindu, and leaving the rest as Buddhist. Both these classes have single chambers, surmounted with more or less sloping towers or steeples; whereas the Tamulian temples are many-chambered and many-storied, the upper stories gradually receding, till reduced to a single small chamber, which is surmounted with a domical structure. Thus the latter differ materially from the style familiar with the Northern Indian races, and form a separate class. It is, however, not unknown in Northern India, for both in Bengal and the Upper Provinces, many examples of it under the name of *Pancharatna, Navaratna,* &c.*, may be met with, some of considerable age: there they appear as strictly Hindu—a variety, but still a variety, of Hindu structures,—and not Tamulian. The northern Hindu class of temples have several subordinate groups or orders, of which (*a*) the Orissan or Central Indian, (*b*) the Bengali, and (*c*) the Northern Indian, styles, are the most prominent. Examples of the first style are to be met with in the whole of Orissa, in Sambhalpur and Chutia Nagpur, in the eastern parts of Central India, and the southern part of Behar. The second style is confined within the limits of Bengal proper. The third takes the whole sweep of Northern India, from Benares to Guzerat. The temples of Kashmir constitute a class by themselves, being Indian in plan, but peculiar in their details and ornaments. Some of the later Northern Indian temples show a considerable admixture of Saracenic elements in their composition, and these may be fitly included in a distinct order, the transitional, or mixed style. Thus we have—

Class.	*Order.*
I.—Buddhist,	1. Northern Indian. 2. Southern Indian. 3. Singalese. 4. Burmese. 5. Javan. 6. Nepalese.
II.—Jain.	
III.—Northern Hindu,	1. Orissan or Central Indian. 2. Bengali. 3. Northern Indian. 4. Transitional or Indo-Saracenic.
IV.—Southern Hindu or Tamulian.	
V.—Cashmerian.	

This classification of temples is no doubt tentative—purely provisional for the time, and adop[illegible] a view to convenience, until a more reliable one is developed by further research. In drawing it out we have directed our attention more to general outlines and plans, than to ornaments and architectural details, for they have been so extensively interchanged, or used in common, that it would be relying on broken reeds to accept them as guides to classification. Thus for instance, the crucial capitals, which have been accepted by many as positively and unmistakably Buddhist, occur alike on Buddhist, Hindu and Jain temples. Mouldings, bands, brackets, cornices, niches, are also alike on Hindu and Buddhist fanes, and it is often d[illegible]lt, if not impossible, to pronounce upon the character of a building in the absence of especial sectarial marks, or specially sectari[illegible] ornaments, such as the Buddhist rail and the like.

It shou[illegible] be observed also that the classification here adopted is not recognised in old Sanskrit works on architecture. They all tr[illegible] one whol[illegible] without any reference to sects and nationalities. The treatise of Maya, the Dánava, does not, i[illegible] of [illegible]is vakarmá, the architect of the gods. The differences of the two authors refer to

* [illegible] oldest, and most sumptuous of this class in Bengal is the temple of Kantanagar in Dinajpur.

details and modes of treatment, and not to general principles, which are alike in all. For instance, the Mánasára, an elaborate treatise on architecture of an early date, alludes to the peculiarities of Buddhist and Jaina images, and the different modes of placing them in temples; but the rules of building and proportion are the same in it as in the Maya S'ilpa. It should be added, however, that when the different works whose names have already been met with are all discovered, and carefully examined, and compared with the detached notices which occur in the Puránas, the Tantras, and other works, the public will be in a better position than now to arrive at a positive opinion on the subject. Of works principally devoted to architecture, Rám Ráz notices the following: *viz.*, 1, Mánasára; 2, Mayamata; 3, Kás'yapa; 4, Vayghánasa; 5, Sakaládhikára; 6, Vis'vakarmiya; 7, Sanatkumára; 8, Sárasvatyam. Of these different works he had considerable portions of the first four, and a few detached chapters of each of the rest. The Library of the Asiatic Society of Bengal contains a MS. of the first, but it does not correspond with the text of Rám Ráz in any particular: it extends to forty-six chapters, while that of Rám Ráz comprises fifty-eight, and the topics, though the same, are differently arranged. A manuscript received from Tanjore corresponds in the number of its chapters with the Asiatic Society's MS.; but its chapters are shorter and very corrupt, and the topics are different. It differs from the others also in naming the work Mánavasára instead of Mánasára.

Rám Ráz's description of the second corresponds very closely with the Tanjore text, which bears the name of Maya S'ilpa, alias Maya-mata, alias Vástusástra, alias Pritisthána Tantra. It is written in the Tántric style, and evidently belongs to a much later age than that of the Páṇḍus for whom its reputed author, Maya,* built a palace, or that of Das'aratha for whom, according to Rám Ráz, he is likewise said to have built a royal residence. The MS. is incomplete and corrupt. It is written in verse, and extends to nineteen hundred verses, divided into twenty-six chapters as follows: 1, Architecture defined; 2—3, Examination and purification of the grounds intended to be built upon; 4, Measurement of land; 5, Ascertainment of the points of the compass; 6, Fixing of pegs to demarcate the spots for building; 7, Offerings to gods; 8—9, Measures for villages and rules for laying out towns and villages; 10, Direction for laying out squares, octagons, &c.; 11, Laying the foundation of a house, and the ceremonies to be observed on the occasion; 12, Plinths; 13, Bases; 14, Pillars; 15, Stone work; 16, Joining and cementation; 17, Spires or tops of houses; 18, One-storeyed houses; 19, Two-storeyed houses; 20—21, Three, four, &c., storeyed houses; 22, Gopuras or gates; 23, Mandapas; 24, Out-offices, barns, treasuries, &c.; 25, Open courts or choultrees; 26, Linear measure. On the whole the work sticks pretty closely to architecture, and indulges very little in astrological vagaries, which prevail so greatly in the other works.

Of the 3rd, 4th, 5th, 7th, and 8th works of Rám Ráz's list I have as yet not been able to procure any exemplar. Rám Ráz gives no detailed description of the 6th. I have seen three recensions of it. The first, from Tanjore is, like the Maya S'ilpa, written in the Tántic style, having S'iva for its narrator. Its contents are: I. Origin of Vis'vakarma; derivation of the words *takshaka* (carpenter) *vardhaki* (sculptor), &c. II. Height of man in the different ages of the world; wood and stone for the formation of images. III. Sacraments for sculptors and carpenters. IV. Halls for the consecration of S'iva and other gods. V. Proportions of images of the planets and lingams. VI. Formation of cars. VII. Consecration of cars. VIII. Forms of Bráhmi, Mahes'vari, and other goddesses. IX. Sacrificial or Brahmanical thread. X. Sacrificial threads of gold, silver, and *munja* fibre; the different sides where images of gods and goddesses are to be placed; qualities of a kind of stone called *Hemavarṇa* or "golden stone" to be found to the south of the Meru mountain. XI. Images of Indra, Máhes'vari, and other gods and goddesses. XII—XIII. Crowns, crests, and other head ornaments. XIV. Movable and fixed thrones for images; crests and other orna-

* Dr. Weber surmises that Maya is the Sanskrit form of Ptolemaios, the author of the Almagest. He writes the word *Asuramaya*; in Sanskrit writings it often occurs in the form of *Mayadánava*; but *Asura* and *Dánava* are used as synonymous terms, both meaning a demon, a Titan, a giant, and therefore either term may be used at option as an epithet for Maya. Literally *Maya* may be accepted as the Sanskrit rendering of *maios*; but it would leave the first two syllables, *ptole*, unaccounted for. Dr. Weber does not say in so many words that those syllables are represented by the epithet *asura*, but he so uses the epithet along with Maya as to indicate that he means it. No recognised law of Philology, however, will accept *asura* to be the Sanskrit equivalent of the Greek *ptole*. In the 13th Aśoka edict, Ptolemaios appears as *Turamáya*, and the Mahábhárata, if we take it to have been written after Aśoka, should have adopted the same spelling. Claudius Ptolemy, the author of the Almagest, lived in the second century (140—160) A. C., and the date therefore of the Mahábhárata has to be brought down to at least three centuries after that; so that an Ionian may be represented as a giant fighting with a Hindu prince, without causing any misgiving in the minds of the readers of the narrative, as to its authenticity. But the Mahábhárata, in the course of its [illegible] thousand verses, nowhere alludes to Buddhism or Buddha, and must therefore, and on other grounds not worth naming here, date from before the birth of S'ákya; or at least the 6th century B. C., and to bring it down to the middle of the fifth century of the Christian era, on the strength of *Maya* being similar in sound to the last two syllables of a Greek name, the first two syllables being overlooked, or represented by an epithet in direct opposition to all laws of Philology, would be to subvert all historical consistency. Nothing short of the intrepidity of a Wilford could accept such a major for a historical argument; and I must confess my inability to appreciate the value of such a system of logic. Had the work of Maya [illegible] originally existed been compared with the Almagest, or any other [illegible] architecture by Ptolemy, and found to correspond, there would [illegible] very good reason for accepting the surmise to be well founded; but [illegible] absence of such proof, it is futile to urge it as an argument. The M[illegible]lus, as it now exists, treats of architecture solely as [illegible] Almagest has "various problems of the [illegible] mony" for its subjects, and between the [illegible] Ptolemy also wrote a great work on geography, bu[illegible]pared with the Maya S'ilpa. He is said by Dr. Weber [illegible]ters, but nobody has yet asserted that he ever wrote any tr[illegible].

ments for the head; repairs of temples. XV. Proportions of doors of temples for lingams. XVI. Proportions of doors for other temples. XVII. Temples for Vighnes'a. Most of these chapters appear imperfect and fragmentary, and the work is obviously incomplete.

The second belongs to the Library of the late Sir Rájá Rádhákánta Deva. It bears the name of Vis'vakarma-prakás'a, and comprises thirteen chapters as follow: I. Introduction, selection of different kinds of land for building houses for Bráhmans, Kshatríyas, &c. II. Months appropriate for commencing a building, the area whereof is to be regulated by the cubit of the owner, or of his wife, or of his son. III. Astral influence on buildings. IV. Bedsteads, shoes, houses, roads, Mandapa and other objects. V. Offerings to certain gods. VI. Various kinds of houses, and making of bricks and other building materials. VII. Size of doors to be regulated by the planet which presided on the natal hour of the person who causes the house to be built. VIII. Direction, for making houses, tanks, wells, &c. IX. Ditto for cutting down trees. X. Ditto for entering a new house. XI. Rules for building fortifications. XII. Removal of bones &c. from the ground before building thereon. XIII. Characteristics of houses of different kinds, and their appurtenances.

The third belongs to the Library of the Asiatic Society (No. 629). In some places it bears the special title of Aparájitapricchhá, in others Jnána-ratnakosha. Like the preceding two, it is written in the Tántric style; but the narrator, instead of being S'iva, is Vis'vakarmá. It comprises thirty-five Sútras, some of which are evidently quotations from other works. It treats of architecture and sculpture, but in a very desultory and imperfect way. None of these works, however, has yet been analysed and reported upon, and there is so little before the public besides the details, meagre at best, in the essay of Rám Ráz on Indian architecture, that it would be quite unsafe to arrive at anything like a definite conclusion on the question. The Tanjore MSS. above referred to have been received through the kindness of Mr. A. C. Burnell of the Madras Civil Service, and I have obtained two others* from Northern India. The South Indian treatises abound in Kanarese and Tamil words, and both the northern and the southern codices are full of technical terms, all but perfectly unintelligible to me. The MSS. procured by Rám Ráz were equally puzzling. Describing them he says: "Mutilated as they invariably are in many important parts, almost every line of them is not only disfigured by gross errors, perpetuated by a succession of ignorant transcribers; but the technical terms and memorial verses with which the whole abounds are so little understood either by the artists or the pandits of the present day, that it requires no ordinary exertion to comprehend and explain the exact import of even a single section."† In Bengal there are no artists who have any knowledge of the subject, nor any Pandit who is acquainted with more than the name of the S'ilpa S'ástra, and unaided by practical knowledge the subject would require a much deeper and a more thorough study than what I can at present afford, to ensure anything like a reliable and useful summary. A few extracts from some of the works to illustrate particular topics will be given lower down.

Of the several styles enumerated above, the most important for the purposes of this work are the Buddhist and the Central Indian; the remains at Khandagiri belonging to the former style, and the Hindu temples throughout Orissa to the latter.

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* S'ilpa S'ástra, Vástupradípa.

† Rám Ráz's Architecture of the Hindus,—p. 3.

CHAPTER II.

CONSTRUCTION OF ORISSAN TEMPLES. Shape of the original habitation of man. Oldest lithic monuments, rectangular. Indian temples, cubical. Module of Benares temples. Bengali temples. Orissan temples; their projections; steeples; upper chambers; plinths; pinnacles; porches; dancing halls; refectories; court-yards; entrance gates. Materials used in the construction of the temples,—laterite, sandstone, chlorite, granite, gneiss. Mode of building; irregular, horizontal, and cyclopean styles. Mortar; clamps; ghooting or kankar cement; architraves; beams; wood.

CONSIDERABLE differences of opinion exist as to the form which was first adopted by man for the formation of his dwelling. The models he had before him to work upon were natural caves or caverns, which were all more or less rounded, and deficient in sharp well-marked angles, and they led to the theory that the earliest habitations of the human race were circular in plan, and rounded in form. In support of this opinion, it is said that the dwellings of the ancient Gauls were circular huts built with wood, and lined with mud; and the pile huts of Switzerland were of a similar nature.* On the other hand, nothing was likely to prove more troublesome to primitive builders than circular designs, and the earliest examples of dwellings still extant in America, Africa, and Oceania, are mostly rectangular, *i. e.*, those houses which are intended to be permanent and fixed, have straight sides, and rectangular corners, while those which are intended to be easily moved about, are more or less circular. Ascending from wood, wattle and mud to bricks and stones, this view of the question appears to receive peculiar confirmation; for the oldest houses and temples were, with a few rare exceptions, straight-lined in their ground plan, and perpendicular for at least a part of their height. The oldest lithic monuments of human art still extant, are the Pyramids of Egypt, and their chambers bear out this opinion in every particular. They are all rectangular enclosures with upright walls. The temples of that country were also of the same character, and the palaces of Assyria and Babylon did not any where depart from this rule. Some of the Pelasgic tombs in Greece enclosed circular chambers; but as they were erected long after the time of the first ten dynasties of Manetho, and produced at a period when the art of building had been brought to a comparatively high state of improvement, they cannot controvert the theory regarding the outline of the earliest buildings. It may be stated, however, that while in buildings the circular form is difficult, in graves, it is the simplest, and most readily produced, nature helping in a few years to complete where the art of man fails to attain the object, and the transition from the circular to the rectangular plan, as in the Pyramids, implies a considerable advance in civilization and architectural ingenuity.

Gr[illegible] plans of temples.

As regards temples in Northern India, the rectangular plan was everywhere the most prevalent, and it is difficult to notice an exception to the rule. At first sight the topes may appear to be different; but if their character be carefully studied it will be found, that there was no departure from the rectangular design of temples. The Dehgopas of [illegible] are mere local adaptations of the Indian tope, and none of them is of greater antiquity than the middle of the 6th century, A. D., and as the[illegible] funeral, or cinerary monuments, and not temples, they may be left altogether out of consideration. It is said that there are, in some parts of Bengal, temples designed for the observance of the mystic rites enjoined in the Tantras, which are triangular in their ground plan; but as they are recent structures, designed for a sectarial purpose, they do not contradict the remark regarding the primitive form of Indian temples. Generally speaking temples in Northern India are not only rectangular in plan, but cubical in the form of their body. From Orissa to the foot of the Himálaya, there is scarcely a single exception to this rule.† In the *Agni Puráṇa*,‡ it is ordained, that the ground plan of every building should have four equal sides, and the *Jṇána-ratna-prakás'a*§ and the *Mánasára* support the same opinion. Figures of Vishṇu and some other divinities may be found located in oblong rooms, but such structures are no where reckoned as temples *(mandirs)*. Again, in Southern I[illegible] the square chamber for temples appears to be the rule, and oblong cells the exception.

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* Lubbock thinks they were rectangular. Prehistoric Times, p. 126.

† The chamber of the *Jyesthes'vara* temple on the Takht i Suleman hill, in Kashmir, is circular, but its ground plan is a square with the corners notched with three salient and four re-entering angles.

‡ चतुर[illegible] क्षेत्रे दशधाप्रतिभाजिते ।

चतुर्भागा भवेत् भित्तिः शे[illegible]

[illegible] Ind. p. 122.

§ प्रासादं सम्प्रवक्ष्यामि सर्व[illegible]

चतुरस्रीकृतं क्षेत्रं भजेत् प्रा[illegible]

[illegible] R. P., fol. 51.

In the case of buildings other than temples, the ground plan no doubt varied according to circumstances, and [illegible] architecture describe a great number of forms. The *Rája-mártanda*, an astrological work ascribed to Rájá Bhoja of Dhár, enumerates sixteen different kinds as the most noteworthy. These are; 1*st*, oblong,—*Ayata*; 2*nd*, square,—*chaturasra*; 3*rd* circular,—*vritta*; 4*th*, oblong, with a rectangular court-yard in the middle, very like the Roman compluvium,—*bhadrásana*; 5*th*, discus-shaped, *i. e.* circular with lunette projections, or wings, on the four sides,—*chakra*; 6*th*, linear or long and narrow with two unequal wings,—*visamabáhu*; 7*th*, triangular,—*trikona*; 8*th*, cart-shaped, or quadrangular, with a long triangular projection on one side,—*s'akatákrita*; 9*th*, staff-like, or long and narrow like a barrack,—*danda*; 10*th*, quadrangular, with the opposite sides hollow-arched, or concave, like the mouth of the musical instrument called *panava*,—*panavasansthána*; 11*th*, like the musical instrument called *muraja*, (I know not what this is); 12*th*, wide-fronted,—*vithanmukham*; 13*th*, heart-shaped like a palm leaf fan,—*vyajana*; 14*th*, circular with five projections like a tortoise with its four projecting feet, and head; 15*th*, arched like a bow,—*dhanuh*; 16*th*, horse-shoe shaped like the winnowing fan,—*surpa*.* Of these the oblong with a rectangular court-yard in the middle was held in the highest estimation, and still continues the favourite, almost every Hindu dwelling house of any pretension in Bengal being built in that plan, whence *bhadrásana* has become the ordinary name of a dwelling house in the present day; and in the north-west it is very common. For comfort, convenience, light, and ventilation, it is perhaps the best that could be designed in a warm climate, and it is worthy of note that European architects have of late adopted it in designing several public buildings in Bengal. In the *Mrichchhakat'i*, which dates from the first century before Christ, there is an account of a house of this description, which had successively eight court-yards;† and the grandeur of a house is generally reckoned in almost every part of India in accordance with the number of court-yards it comprises. The merits of these several kinds of houses are thus described in the *Rája-mártanda*: "The oblong insures success everywhere; the square brings in money; the circular promotes health and prosperity; the rectangular with a courtyard fulfils all desires; the lunetted-wheel causes poverty, and the unequal-winged bereavement; the triangular makes the owner a king, and the cart-shaped leads to loss of wealth. Cattle die away if the plan be staff-like, and vision is lost by the *panava* shape. The muraja shape causes the death of the owner's wife; the wide front loss of wealth; and the fan shape, loss of situation. The tortoise leads to theft, so does the bow shape; while the horse-shoe form causes loss of wealth."‡ Regarding the nature of the ground on which the house is to be built, it is said; "men prosper, if the ground slope to the east; wealth is acquired, if the southern side be elevated, but it is lost if the west side slope down, and there is certain destruction if the north side be high."§ As domestic architecture, however, does not fall within the scope of this work, it is not necessary to enquire into the subject further.

Ground plans of houses.

According to the builders of Benares, the body of the temple is the module upon which the rest of its parts are to be calculated. The length, breadth and height of the body should be the same, and its steeple, *Surrá*, Sk. *chúdá*, should vary according to the size of the temple and the number of pinnacles it is intended to bear, from 1¼ and 1½ to 2 and 2½ lengths.‖ The plinth is to be one-ninth of the total length, *i. e.*, one yard if the temple be nine yards high. The door in that case should be 7 feet 5 inches by 4 feet 9. In small-sized temples the door is generally one-fourth of the cube. The first member above the spire, is a thick square plate named the *Rámarékhá*, from certain denticulations on its edges, having some resemblance to the sectarial mark of the followers of Ráma,—a common ornament for the upper edge of projecting stones. In a temple 9 yards in height, it should be 12 inches in depth. It is intended to cover the vent of the spire, and form the basement of the *kalas'a*, or crowning member of the spire. Above it is placed a small compressed ribbed dome, 15 inches [illegible]

Relative proportions of Benares temples.

† Wilson's Hindu Theatre, I, p. 82.

‡ आयतं चतुरस्रञ्च वृत्तं षडस्रसंज्ञकं ।
धनं विषमबाहुञ्च त्रिकोणं शकटाकृति ॥
दण्डं पणवसंस्थानं मुरजञ्च शरूपकं ।
वाजनं कुर्म्मपञ्च भग्नं धनुश्चैव षोडश ॥

§ आयतं सिद्धयः सर्व्वत्रानुरस्रे धनागमः ।
वृत्ते पुरुषि वृद्धिश्च भूयोभिर्व्यसनागमः ।
दण्डे दारिद्र्यमेवाहो भोगो विषमबाहुके ।
पणवोक्तविकारेषु च मरणं च धनक्षयः ॥
[illegible] धनं दत्ते पणवं [illegible]
[illegible] भोगं धनागमं शरूपके ॥
[illegible] स्यात् कुर्म्मे धनमेधोदकं ।
[illegible]
[illegible] धनं दक्षिणभागतः ।
[illegible] धनमुत्तरे ॥

‖ The head [illegible] of Vis'wakarma is my principal authority, and I h[illegible] by two other builders at Benares.

The practice is to divide the temple into three parts; 1*st*, the plinth or *kursi*; 2*nd*, the body or *janghi*, including the cornice and the base mouldings; 3*rd*, the spire or *chúdá*, comprising base mouldings, spire proper, turrets, pinnacle, trident, and flagstaff. James Prinsep has noticed the same arrangement, but he does not give their relative proportions. *Prinsep's Benares.* Under the head of elevation of a Hindu Temple, Rám Rás, quoting Kás'yapa, classifies all temples into five classes according to their respective heights. These are—1*st*, *Sántika*, "moderate;" 2*nd*, *paushtika*, "bulky;" 3*rd*, *jayada*, "triumphant;" 4*th*, *adbhuta*, "admirable;" and 5*th*, *Sarvakáma*, "all-pleasing;" the breadth of these five kinds of temples being divided into seven, six, five, four, and three parts in due order; ten, nine, eight, and seven of these parts are given to their respective heights" (Arch. of the Hindus, p. 40). General Cunningham has reduced these proportions into the following tabular form.

	height	breadth
1st Modest,	1½	1
2nd Bulky,	1½	1
3rd Triumphant,	1½	1
4th Wonderful,	1½	1
5th All-pleasing,	1	1

[illegible] from its resemblance to the fruit of the emblic myrobolan. In the *Agni Purâna*, and in the *Mânasâra*, it is named *Udumbara*, and likened to the fruit of the *Ficus glomerata*. It is surmounted by a ribbed conical construction called *mord*, and having very much the appearance of a ribbed, inverted funnel, or a lotus reversed, 9 inches long. It has been, by some, called an umbrella. Then follows the neck, *gala*, 2½ inches, serving as the support of a rounded moulding, *kangani*, 3 inches thick. A neck then follows, and on it is placed a vase, or jar, named *gagri*. It should be 18 inches high. Upon it stands a second jar, 9 inches long, and sometimes a third of a smaller size, which supports the metal cap and the trident, or the discus, each of which should measure 18 inches in length. The steeple is generally slender, having straight sloping sides, but occasionally its outline is curvilinear. In its simplest form, the steeple rises from above the cornice without any basement; but generally it has four little turrets or pinnacles, *khûrkibhadras*, on the four corners: in ornate forms the turrets are ranged in tiers, and their number is multiplied till, in the most elaborate specimens, there are as many as 108 of them, arranged in six tiers.

Various kinds of temples compared.

Two specimens of this form of temples are shown on the margin, (woodcuts, Nos. 9 and 10). The first (No. 9) has been copied from an original in the neighbourhood of Vis'ves'vara's temple at Benares. It is the simplest of its kind, and has a perfectly plain spire. The second (No. 10) has the surfaces of its walls and spire broken by slight projections, and its corners set off by partially attached turrets, but without any attempt at ornamentation. The most perfect specimens of this style are seen in the temples of Vis'ves'vara and Kedâra at Benares.* If they be compared with the Orissan form as delineated in woodcut No. 11, it will at once be perceived that the latter had supplied the model on which the former has been built, but that the builders have greatly improved upon the original plan. The thick heavy tower of the primitive design has been replaced by a slender steeple, the projections thereon by more or less attached turrets, the crowning ornaments reduced in bulk and improved in appearance, the walls of the body divested of heavy projections, and embellished with a number of delicate pilasters, and the whole set off on a well-raised and elegant plinth. All the improvements, additions and alterations are, however, strictly Indian and original,—nothing borrowed from people

No. 9, Primitive Benares Temple.

No. 10, Typical Benares Temple.

No. 11, Typical Orissan Temple.

No. 12, Indo-Saracenic Temple.

beyond the boundary of this country. In No. 12, the case is, however, entirely altered. In [illegible] pure Hindu edifice is embellished with foiled arches and decorated battlements in the true Saracenic style, [illegible] ribbed dome

* Vide Prinsep's Illustrations of Benares.

of the same order,—a combination which destroys the peculiarities of both, and results in a hybrid [illegible] elegance and beauty. Specimens of this mixed, or transitional, style of construction may be found in Benares, Allahabad, Mathurá, and in the Western Presidency generally.

No. 13, Bengali Temple.

Bengali Temple.

No. 13, represents a specimen of the Bengali style, where the cubical body of a northern temple is covered over by four curvilinear sloping roofs in exact imitation of thatch, and the point of junction at the centre surmounted by a miniature representation of the original construction. This structure has no distinct cornice, its place being supplied by the arched ends of the projecting roofs under which ornamentations are produced with great care to represent the ends of the frame work. This style is distinct from that of Benares on the one side, and of Orissa on the other, and hence it is, that it has become necessary to divide into three groups the style which Mr. Fergusson has included under one name.

Shape of Orissan temples.

The Orissan temple in its simplest form is a cube, rising from the ground without a plinth, and its tower is the result of four battered walls gradually approaching each other to supply the place of a roof, the top—a frustum—being closed in with a thick slab, which in the Benares, or the Jain, style, is represented by the Rámrekhá. Such a chamber dedicated to an image can require but one doorway, and the first idea of ornamentation would be suggested by the necessity of a dripstone, or hood-mould, or weather-moulding over it to throw off rain. To render this moulding effectual, its projection should be considerable, and to support it, two pilasters become absolutely necessary. These produce the most primitive porch, and a great number of such structures may be seen in every part of Orissa. From pilasters to pillars, the transition is easy enough, but it has not been frequent, the great majority of temples having pilasters, and not pillars. The foundation of these pilasters causes the first break in the square ground-plan of the earliest temples. Vide woodcut, No. 14. *A' priori*, one may suppose that poverty of invention, or more probably a love for symmetry, would lead to a repetition of the projection on all the four sides of the temple chamber, and this is exactly what is met with in the fanes of Bhuvanes'vara and Puri—a square outline with four projections as shewn on the margin: woodcut No. 15. The projections in such cases are not deep, and the pillars, when employed, occur only on the side of the entrance. The proportion of the projection to the entire length of the temple varies from 1 to 3 to 2 to 5. The depth of the projections varies even more largely; indeed it is doubtful if there ever was any fixed rule on the subject.

No. 14.

No. 15.

When the architectural advantage of these projections was once perceived, and the nakedness of large walls had to be covered, they were repeated two, three or four times, as is to be seen in the temples of Rájaráni, Kapiles'vara, Rámes'vara, &c., &c. (woodcut No. 16). The next step towards improvement, was the development of these projections into distinct pilasters, such as are to be seen on the temple of Ananta Vásudeva at Bhuvanes'vara. The three-fold projection of each side is there converted into seven pilasters by slight intermediate breaks, and the artistic effect is thereby very much heightened. On the great tower of Bhuvanes'wara and other large structures, the same arrangement has been carried out to great advantage. When these projections are particularly deep, and the intermediate spaces wide, they assume the character of buttresses, which add considerably both to the mechanical strength and the beauty of the buildings by an agreeable play of light and shade. But whether deep and wide, or flat and narrow, they are always carried along the whole length of the structure to the top of the spire, and when divided into pilasters of low relief they give a ribbed, or fluted, appearance to the whole. On richly ornamented temples they are, on the steeple, carved into strings of small models of temples in some relief, so as to obviate the æsthetic defect of slender pilasters of great length. On the body of the building, the same object is attained by opening two or three tiers of niches for the reception of statues, or bas-reliefs. At Benares, the projections under notice are either omitted, or shaped into pilasters, and the little models are more or less detached from the spire so as to produce distinct chaplets or pinnacles, which greatly improve the appearance of the building. In Jain temples, these pinnacles are completely detached so as to convert them into little pavilions. In Bengal they are altogether wanting.

No. 16.

No. 17.

Tower.

[illegible]ant of the principles of the true arch, the architects of Orissa found the greatest difficulty in covering large areas with a substantial roofing. The Jain plan of triangular blocks cutting off the corners of the original square, and by two or three repetitions reducing considerably its size, so as ultimately to be fit to be covered by a [illegible]ate size, (woodcut No. 17), was not sufficient for them, and single slabs could seldom be found of [illegible]nd breadth, and so free from defect, as to suffice for temples of the size of the Great Tower of Bhuvanes'wara. [illegible]dy resource was, therefore, the horizontal arch of parallel projecting courses of stone in flat layers,

No. 18. Section of an Orissan Temple.

of corbelling which they could carry out to any extent they chose (woodcut No. 18). As they always built with stone, and that material was nowhere scarce, the great thickness required in the supporting walls to resist the weight and thrusts of a large mass of superstructure was, to them, a matter of no consideration, and the great height to which they had to carry their towers to close large areas by very gradual projections, served only to heighten the grandeur and majesty of their sacred piles. The edges of the projecting stones, both within and without, were so cut off, as to produce an even outline; but sometimes the inner edges were decorated with mouldings, or left untouched, giving to the ceiling the appearance of a flight of steps reversed. The plan of building adopted, was the simplest, and at the same time the most effectual.

In the middle of the 7th century when the Great Tower of Bhuvanes'vara was erected, the builders had acquired sufficient proficiency in balancing their materials in a projecting arch to avoid the necessity of lofty towers, and yet the artistic effect of the tower being highly prized, they generally utilised the space within it by dividing it into two or three stories; the rooms being used for the deposit of jewelry and other valuable treasures of the temple; serving thus the same purpose which the opisthodomus did in Grecian sanctuaries. The chambers are never accessible to outsiders, and I could not ascertain how they were lighted, or ventilated. The stairs are enclosed within one of the walls of the temple, and reached through the sanctuary itself. It is said by the priests at Bhuvanes'vara, that about a hundred years ago, a man had ascended with a lamp in hand to the upper story of the Great Tower, but through the displeasure of the presiding divinity, he was suffocated to death before he could attempt to retrace his steps, and that, ever since, nobody had attempted to explore that much dreaded chamber. The tower of the great temple at Puri, has, likewise, some rooms within it, but they too are not in use now. These facts suggest the idea, that they are devoid of all opening for light and air, and the mephtic vapours which have accumulated within, render them unapproachable. In the temple at Buddha-Gayá, there are two moderate-sized windows to give light to the upper chambers, but I could not perceive the trace of even a breathing hole in any of the Orissan steeples.

Plinth.

In plain temples, the plinth is, as already stated, generally wanting, and the body of the edifice rises from the surface of the ground with which the floor is flush. But in elaborate structures there is generally a basement or platform of some pretension, varying in height from two to five or six feet, and diversified by a variety of bands and mouldings, or broken in their outline by projecting pedestals of various shapes.

Pinnacle.

The pinnacle includes most of the elements of the Benares *Kalas'a*, but their relative proportions are entirely different. The square plate *rékharekhá*, on the top of the steeple, is small in size, and of slight thickness, having more the appearance of the plinth of a pillar held very much within the flattened top of the steeple than of a massive covering for the head, projecting considerably beyond its area. It is, besides, invariably plain, and has none of the denticulations which give it its peculiar name. Above it, a narrow neck of low height supports the *amlas'ilá*, which, instead of being of the small size and insignificant appearance common at Benares, assumes the proportions of a regular dome. It is invariably solid, compressed, and ribbed, having the appearance of a gigantic melon, the height being about half the horizontal diameter. In building it, eight stones are generally used, four above and four below; but in small edifices one or two stones suffice for its construction: sometimes a great many stones are used, as shown in the section above. For the support of its projecting edge, four [illegible] lions-couchant, or ugly dwarfs, are commonly employed, and they face the four sides of the body of the temple.

Kalas'a.

The dome is surmounted successively by the *mord*, and the *kharní*, as at Benares, and thereupon is placed the *kalas'a*, or jar, but its shape is remarkable,—quite different from that of the ordinary Indian pitcher of the present day. After a careful examination of several scores of specimens at Bhuvanes'vara, Puri and the Behar district, I can compare it with nothing so close as a Grecian amphora. The body, the neck, and the ornamentation of this vessel, appear to be pretty near copies of European models, and yet its presence on edifices, which have nothing else that could bear the most distant resemblance to foreign archetypes, precludes the idea of the model of these jars having been imported from Greece, or Italy. The intercourse which formerly existed between the nations of the East and the West, could easily account for the importation of amphoræ, and other Grecian vessels to India; but it is impossible to suppose that sacerdotal bigotry would so far yield to æsthetic considerations, as to permit a foreign wine-cup to crown the spires of its holiest temples. I am disposed, therefore, to attribute it to an effort to improve upon the ordinary water jar of the period, resulting in an ornamental specimen of the ancient *ghard*. A well-filled pitcher, on the top of a thatched roof is an important [illegible] which the people of this country seldom forget, and that it should be reproduced in stone as an ornament [illegible], the most conservative of conservatives, is by no means extraordinary; and that in its transit from earth to [illegible] be improved

and embellished is but natural, and a matter of course. In Orissa, the jar is never repeated, [illegible] Provinces, where the people carry on their heads two, three, and sometimes four pots of different sizes, the kalas'a is repeated two or three times on their temples.

The Orissan name for this temple is *dewul*, Sanskrit *vimána*. It occupies the place of the European *naos*, *cella*, *adytum*, ἄδυτον, or sanctuary, being the abode of the visible representative of the Godhead. It has an *edos* on the side opposite the entrance, on which the image or images are seated. In all well-ordered fanes this raised platform, or throne, is made of stone, and finished with great care; but in poor and more recent temples it is replaced by a wooden chair. In S'ivite temples, it is entirely wanting, and the image is placed in the centre of the floor.

Porch.

Allusion has already been made to the porch in its simplest form, consisting of two pilasters sustaining a projecting weather-moulding. The transitions from pilasters to detached pillars, and from a simple moulding to an architrave and cornice, appear to have taken place at an early date; for this arrangement is observable in some of the oldest and least pretending edifices. Occasionally, but rarely, the pillars were placed in a recess made for the purpose in the wall, and it gave to the front somewhat the appearance of what in Grecian temples is called *in antis* ἐν παραστάδι. In the North-Western Provinces two additional columns were soon added, which, with a pyramidal roof, produced a detached pavilion, or kiosk, in front; and this has since been greatly improved, particularly in Jain temples, by multiplying the columns and extending the area of the building. But in Orissa the change did not sort with the massive character of the larger temples, nor suit the requirements of the priests, who, probably, thought the light admitted into the sanctuary through its single door too much for the mystic character of their rituals, and the generally unattractive appearance of the idols. A walled building was, therefore, preferred to an open, columnar, or arcaded, one; and for the sake of variety, and to mark the distinction between the temple and its porch, its top was closed with a pyramidal roof instead of a steeple. The Orissan name for this structure is *Jagamohan*, "the fascinator of the world," for it is from this place that the public are allowed to behold the divinity within. It may be compared to the *prodromus*, or *pronaos*, of ancient, and the vestibule, of mediæval European temples. According to Kásyapa, it is the *Antarála* or ante-temple.* Its ground plan is generally, though not invariably, a square, and its walls are diversified with the same kind of projections as those of the temple itself. At first sight it would appear to differ from the temple in having four doors instead of one; but as frequently, two of them, those on the flanks, are closed either by mullion bars, or lattice work, and the third is brought in contact with the entrance to the temple, there is virtually only one entrance to it.† But it differs from the temple in height, in the form of its roof, and in having, in structures of large dimensions, four pillars arranged in two rows, which divide its floor into a nave and two aisles, or make it a distyle hall. Its height is fully one-third less than that of the temple. The plinth is invariably of the same height, the walls to the cornice generally correspond, but the pyramidal roof is entirely different, and so are the decorations on the walls. The roof is a repetition of the cube of the body with the sides and top cut off to produce its peculiar shape. This is, however, not invariably the case: in two or three instances the sloping roof after being carried to some height is broken by a regular clear story with windows opening all round at short intervals to admit light. The truncated top of the pyramid, where the pyramidal form is adopted, is surmounted by a domical structure of which the most prominent members are the same as on the temple, *viz.*, the amla fruit, and the reversed lotus; but they are repeated, the lower globe very much compressed, and the lotus elongated into an umbrella crown. The upper members remain untouched. The kalas'a is a repetition of what occurs on the temple.

The constructive peculiarity of the roof will be best understood by a reference to the annexed plates. [illegible] outside it is formed of courses of receding stones, broken [illegible] intervals by projecting ledges so placed as to balance the materials, and throw the weight of the roof on the sustaining walls. These ledges are arranged into one, two, or three groups, according to the size of the building, each comprehending four tiers. Sometimes the ledges are wanting as shewn in the woodcut No. 19. The outer borders of the ledges, where they exist, are richly ornamented with floral bands, or groups of animals in low relief. The inner face, or ceiling, is built on the same principle, but it is not of a piece with the outer face. It is formed of three independent series of parallel projecting courses with the tops closed in by single slabs, or spa[illegible]ms, and covered over by several flags of stone. Probably the ceilings were built first and the outer struct[illegible] afterwards and independently of it, for the ceilings have dropped down in several ruined porches, leaving the outer she[illegible] entire. In small porches, where no pillars are used, triangular slabs placed in the corners, sufficed to support the pyram[illegible]structure.

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* Rám Rá[illegible] the Hindus, p. 49.

† At Konár[illegible] entrances are left open and embellished with large figures of hor[illegible] and elephants. Some of the minor porches, such as that of Purasurámes'vara's temple at Bhuvanes'vara, have two or three doors on each side, and their ground-plans are oblong.

further was needed to complete a temple, but in course of time two other buildings were added in a line with the porch. The first was called the *Nátmandir* or "the dancing hall," Sanskrit *Mandapa*,* and in front of it, (2nd), the *Bhogamandir* or "refectory;" and all large establishments now include this four-fold arrangement.

Nátmandir.

The *Nátmandir*, as its name implies, is a festive hall, large, spacious, and open on all sides, corresponding with the *chaultry*, or "marriage hall" of Southern India, except that the sides are not arcaded, but provided with doors, three to four on each side. Its ground plan, unlike that of the temple and the porch, is oblong, and it is connected with the porch behind, and with the refectory in front. Its roof, like that of the porch, is supported on pillars, and constructed on exactly the same principle, but the peculiar projecting ledges and the pinnacle are wanting, and its slope is less. The walls are devoid of sculptures, and not quite so high as those of the porch. Wood-cut No. 19 represents the roof of the dancing hall of the Great Tower at Bhuvanes'vara.

No. 19.

Bhogmandir.

The refectory is a square room having only two doors, one opening into the dancing hall, and the other in front. Its pyramidal roof generally, though not invariably, corresponds with that of the porch, and its walls are profusely ornamented with a variety of floral scrolls and mouldings. It is, however, lower than the dancing hall, which on its part is lower than the porch, and is in every instance that I have noticed a subsequent addition, and not synchronous with the temple.

Enclosing Wall.

This fourfold building is generally surrounded by a high wall, enclosing a large area of ground which forms what was in Grecian temples called ἱερὸν or τεμενος, "the sacred enclosure," which included all the appurtenances of the sanctuary: sometimes a second wall was built round the first, producing two courtyards, an inner and an outer one. The walls, which may be likened to the περίβολος or sacred fence of the Greeks, were invariably plain, both inside and outside, in marked contrast to Buddhist railings which are most elaborately sculptured. At Bhuvanes'vara the wall is capped with a simple coping, sloped on the upper surface, and having a projecting drip to prevent the wet from running down the surface of the wall; but at Puri and Konárak, they are ornamented with Saracenic battlements.

Originally the enclosure contained nothing beyond the main temple and the necessary out-offices, kitchen, &c.; but the sanctity which attaches to such establishments, induced people to avail themselves of every opportunity of dedicating temples erected within the sacred area, and the result is, that the courtyards, as now found, are filled with a large number of fanes of various sizes and diverse pretensions, so crowded together as seriously to mar the beauty of the main buildings.

Direction.

All the principal temples face the East, so that the image of the deity within may face the rising god of day, the natural visible emblem of the invisible Godhead. A similar feeling in Greece led, according to Vitruvius, to the entrance to the temples being turned towards the West, so that those who came to worship might behold the statues of the gods towards the East; but it has also resulted in all its principal temples on the Acropolis and those in Attica, Ionia and Sicily, as also those consecrated to the goddess Athéné—the Helenic dawn, or Ushá,—having an easterly direction, and it may fairly be asked if such an idea has had anything to do with the orientation of many Christian churches? It is worthy of remark that Burmese palaces are always so built as to face the East. The word *Thé* in Burmese means both east and front,† and many of the chief Buddhist and Jain fanes also face the East; but the principle which guided their position is unknown. In the case of minor shrines of the Hindus, this rule has not been very strictly observed, and many fanes may be seen that have fronts towards the West, South, or North. They never, however, have departed from one of the cardinal points of the compass, which was, according to the Silpa-Sástra, invariably ascertained with a gnomon before a building was commenced. The mode of doing it, is thus described by Rám Ráz: "'On a smooth level piece of ground is erected a gnomon," which, according to some, "should be sixteen *angulas* in height, and of the same diameter at the bottom; the whole should be shaped like the leaf of an opening bud, tapering gradually from the bottom to the top." Around this a circle is drawn with a cord of twice the height of the gnomon, by fixing one end of it to its base, and carrying the other round it. Points are marked in the circumference where the shadow of the gnomon projects, both in the forenoon and afternoon, that is, at any given hour after sunrise, and at the same time before sunset, [illegible] these points a right line is drawn so as to join them; the point marked by the morning shadow will show the East, and that marked by the evening shadow the West. Then from each of those two points, and with a radius equal to the distance between them, describe two more circles cutting each other, and resembling (in their points of intersection) the head [illegible] of a fish, between which draw a right line, which will point to the South and North. Again, from [illegible] and northern points, which touch the circumference of the inner circle respectively, and with the same radius, describe [illegible] more circles, and the points of intersection on the two other sides will indicate the East and West."‡

* Rám Ráz writes Mantapa, but that is not Sanskrit. † Yule's Mission to Ava, p. 97. ‡ Architecture of the Hindus, 19.

The principal entrance to the temple is placed to the east, right in front of the temple. It is covered by a [illegible] building, the *toraṇa* or *gopura*, with a pyramidal roof, having the figures of the nine Indian planets (*navagraha*) sculptured in more or less relief on the frieze under the weather-moulding. The structure, however, has neither the lofty storied character of the Tamulian *gopura*,* which rises from five to fourteen stories, nor the majesty and massive solidity of the Egyptian pylon, or propylon, but holds a very subordinate place in the whole composition. For guards it has two lions, either seated, or rampant on crouching elephants, a form of grouping to which the Uriyás seem to have been very partial. At Konárak there are also horses and elephants for guards; but they are not common, nor do they at all approach the gigantic size of the human-headed winged bulls and lions of the Assyrian palaces. At Puri there are gateways of about the same size on all the four sides of the enclosure of the great temple; but originally such was not the case at Bhuvanes'vara, the two small doors on the north and the south of the Great Tower now visible, being manifestly subsequent additions: there is no opening in its western wall. The roof of the gateway externally is a counterpart of that of the porch on a small scale, but internally it is so arched as to look like the under surface of a hemispherical dome.

Gateways.

In a country so abounding in stones of various kinds as Orissa, it is not to be supposed that any other material would be employed in the construction of buildings designed for the habitation of the image of the ever-present God, and intended to last for eternity, and accordingly it appears that they were the only substance used, and not a trace of bricks is anywhere to be met with. Of stones, the most common is laterite, next sandstone, and, lastly, *mungni*, or chlorite. For outer walls, kitchens, porticos, and all structures of secondary importance the first is the best suited. It occurs almost everywhere in Orissa within a few feet under the soil, and in many places crops up to the surface. Around Bhuvanes'vara large tracts lie barren, or covered with stunted jungle, from the soil or mould having been washed away from its rocky substratum. In his note on this substance, Mr. W. T. Blanford says: "The form which generally appears at the surface (it being rarely that the lower kind is exposed by the denudation of the upper) consists mainly of round ferruginous nodules, about $\frac{1}{2}$ to $\frac{1}{4}$ of an inch in diameter, in a matrix of dark reddish-brown clay, which is generally more or less sandy. The nodules have a coating of brown hydrated peroxide of iron, and, when broken, some are seen to be black inside; others appears to be formed of concretionary peroxide of iron; others, again, are evidently ferruginous pebbles of decomposed gneiss, or of sandstone, if the rock prevail in the neighbourhood. These little nodules are frequently scattered over the country by the denudation and disintegration of the deposit containing them. In places the substance is so soft that it may be cut, though with difficulty, with a spade; in other places it hardens into a firm rock, sometimes cohering only in the form of large blocks, the intermediate portion remaining loose and gravelly, but frequently forming a hard mass, which covers the surface for considerable areas. It is only at the surface that the rock becomes thoroughly hardened: the lower portion requires exposure to give it firmness and strength: when exposed it becomes cavernous, owing to the washing away of the softer portions, and apparently a chemical change takes place, whereby the iron becomes altered from the state of anhydrous peroxide (and perhaps also of magnetic oxide) into that of brown or hydrated peroxide. To this chemical change the coherence may perhaps partly be attributed; much, however, is doubtless due to the more thorough drying of the clay by the heat of the sun."† Dr. Oldham, commenting on the value of the laterite as a building material, observes: "Few rocks present greater advantages from its peculiar character; it is easy to cut and shape when first dug, and it becomes hard and tough after exposure to the air; while it seems to be very little acted on by the weather. Indeed in many of the sculptured stones of some of the oldest buildings, temples, &c., in the district, the chisel marks are as fresh and sharp as when first built. It is perhaps not so strong, nor so capable of resisting great pressure, or bearing great weights, as some of the sandstones, or the more compact kind of gneiss, but it certainly possesses amply sufficient strength for all ordinary purposes. It is largely used at the present time, but has also been employed from the earliest period from which the buildings and temples of the country, date. * * * Another advantage it possesses over other rocks is the facility of transport, it being generally found in the low grounds, and often at no great distance from some of the many streams which traverse the vicinity. Slabs from four to five feet long are easily procurable of this rock."‡ Exposure to water does not seem to affect its texture in any way, and it is, therefore, also largely used for the building of ghats and retaining walls on the sides of tanks. Being, however, a nodular conglomerate, it is full of cavities and soft interstices, and utterly unfit, not only for sculptures and fine work, but even for paving and other purposes, where a smooth even surface is required. Dr. Oldham alludes to "elaborate specimens of carving and ornament"§ made of this stone, but I have nowhere seen any. The simplest mouldings of bands and fillets are all that have come under my notice.

Material—Laterite.

* *Vide* passim [illegible] History of Architecture, II., 567.

† Memoirs of the Geological Survey of India, I. p. 281.

‡ Ibid, 279.

§ Loc. cit.

Sandstone abundant everywhere. The low range of hills which runs along the whole length of the province, dividing it into two parts, consists principally of this stone, and it is quarried and worked with ease. It is commonly of a grey colour and coarse grain; but a finer variety of an ochreous tint varying in shade from a light fawn to dark brick-red is met with at Atgharh in the Tributary Mehals, and in a few other places, and is largely used for outer facings of temples, and for sculptures. This variety is of small grain, homogeneous texture and great firmness, admitting of very delicate carving without breaking or chipping. As it had, however, to be brought from a great distance, the builders generally tried to economise its use, and to replace it by the grey kind whenever it was practicable without injury to the appearance of their work.

Sandstone.

The *Mungni* is a kind of serpentine, or chlorite. It is of a dark slaty colour, and fine composition, susceptible of a high degree of polish, and when polished, it assumes, like slate, a black colour. In the present day it is largely employed in the manufacture of plates, basins, and other domestic utensils. "The rock yields a beautiful, compact and very tough material, though soft and easy to work. It is admirably suited for fine carvings, as may be well seen in some of the beautifully sculptured doorways of the Black Pagoda, which are carved from this variety of rock. Blocks of almost any size can be obtained, the only impediment being the difficulty of transport from the high hills on which it occurs."* It is, however, not met with in Cuttack, and the distance from the Nilgiri Hills, in Balasore, where it is quarried, to Bhuvanes'vara and Puri, was so great that its use had to be confined to statuary and finer kinds of sculptures, which were not intended to be much exposed to sun and rain. For facing the soffits and jambs of the entrance to temples, for the paving of the cells, as also for thrones of the sacred images, it was also largely employed; in short, it supplied the place of marble which was not accessible to the Uriyás, and was, and is to this day, held in high estimation.

Chlorite.

In descriptions of Orissan antiquities, granite is frequently mentioned by European writers, but I have not seen it employed for building purposes either at Puri, or at Bhuvanes'vara. According to Dr. Oldham, than whom few can speak with more authority on questions of Indian Geology, "throughout the country, south of the Mahánadí, dykes of all kinds are rare, trap is entirely wanting, and granitic veins are seldom seen."† It is probable therefore that, as in the infancy of geological science at the end of the last and the beginning of this century all hard grey-looking stones were mistaken for granite, non-professional men in Orissa, as elsewhere, frequently took the one for the other. Between thirty and forty years ago the Aśoka pillars were described by more than one writer as made of granite, but it is now well known that they are all formed of sandstone. In the same way Bishop Heber called several structures in Agra and Delhi as constructed of granite, which have since turned out to be sandstone or marble. If true granite, however, is wanting, gneiss is common enough, if not abundant, and a granitiferous variety is frequently employed for statuary, particularly on the A'lti and the Nálti Hills: some of the statues of the Black Pagoda are also said to be made of this material; but the bulk of them are of sandstone.

Granite.

As in design, so in the art of building, Uriyá architects display a sad want of variety. If their temples are all of one plan, they are built in almost the same order everywhere. Possibly at an early stage of their progress, they did try other modes of arranging their materials, but by the middle of the seventh century, they seem to have discovered what appeared to them the cheapest and at the same time the most convenient, style of masonry, and continued ever after to practise it without any variation. This was to arrange courses of oblong ashlars of the same height, which were held together by their weight, by their perfect adjustment and by the frequent intervention of bonders long enough to extend to a considerable distance into, or entirely through, the wall. All the courses, however, were not of the same thickness, nor the stones always of the same size,‡ and the result was a kind of work which in reference to Grecian buildings is denominated the "pseudoisodomum." This plan, however, was not followed in the construction of walls of extraordinary thickness. It would have occasioned a great waste of labour and material to have filled up piers seven to ten feet thick with carefully dressed blocks of the same size throughout, and a different style was therefore deemed necessary. This was to build irregular horizontal courses with partially worked stones of various sizes, and to face them on both sides with pseudoisodomic walls of well-dressed flags. Occasionally unhewn masses were rudely piled together with no further adjustment than the insertion of small blocks in the interstices, in the true cyclopean style, but their sides were always faced with cut stones of a

Style of Building.

* Oldham, in the Memoirs of the Geological Survey,—I, p. 278.

† *Ibid* I., p. 264.

‡ Sanskrit works on architecture insist on the ashlars being of uniform size, and the Agni Purána recommends squares of one cubit with a depth of 8 fingers as the most appropriate, but the building of half that size, but the rule seems never to have been respected.

जिला प्रमदशिखरं पादधर्मादिमण्डलम् ।
षडङ्गुलोच्छ्रिता प्रस्थाप्यपुरुषाकरणानां [illegible]

superior quality. It should be added, however, that I have not had many opportunities of examining [redacted] of great thickness in a dilapidated state, to be able to say with certainty whether the cyclopean, or the irregular horizontal style was the most prevalent. The latter was met with in about half a dozen places, and the former only twice: they were in every instance covered with a layer of finely dressed stones, except of course in the foundations where such facings would have been thrown away.

Mortar.

Mortar seems never to have been used; the massiveness of the blocks, and the accuracy with which they were cut and adjusted, rendered it unnecessary. Wooden wedges were also not used, or, if used, they are not now traceable. In the joining, however, of long projecting cornices and roof-stones, iron clamps were frequently employed. At Konárak I also noticed lead in the fissures and holes in the remains of cornices; but neither copper nor brass.* The iron has everywhere rusted and swollen, and produced serious cracks in the stones in which they are imbedded, causing thereby more injury to the temples, than time and climate have done in course of centuries. The Uriyá builders of old appear to have been, to some extent at least, aware of this source of danger, for iron clamps occur less frequently in the ancient temples of Bhuvanes'vara than in the more modern structures of Puri and Konárak.

From the absence of mortar it might be argued that the ancient Uriyás had either no knowledge of it, or had no material at hand to be so employed. Such was, however, not the case. *Ghutiáng* (nodular limestone conglomerate) abounds in almost every part of Orissa, and its ancient builders knew well the value of that article as a cement, and used it extensively for closing the joints on roofs, domes, &c., as also for plastering the interior of their houses and temples; and abundant evidence of its employment may be everywhere seen. It entered largely also in the composition of their vases, and occasionally, but rarely, in the formation of architectural ornaments.

Iron Beams.

Owing to imperfect cohesion of its grains sandstone is ill-adapted for architraves of large span; hence it is rarely employed for such purposes. Chlorite resists lateral pressure somewhat better, but it was scarce, and its great weight rendered it generally unmanageable. Uriyá architects, therefore, resorted to iron beams, which they could forge with ease, and move about with tolerable facility. The iron was probably obtained from Tálchír, where it is smelted to this day, and was of excellent quality, well adapted for their purpose. At Bhuvanesvara such beams may be seen in great abundance. The hypertherions of the principal doorways are formed of bars four inches square, and ten to twelve feet in length; the scantling of architraves being 4 × 6 to 5 × 7 inches, with a length of 12 to 15 feet. Roofs, as already stated, were formed by horizontal arches, but the projections from the opposite sides rarely closed in more than two-thirds of the space, the remainder being covered by flags of stone supported on iron beams. At Puri the beams are of larger dimensions; and at Konárak there is one, 21 feet long with an average thickness of 8 × 10 inches. Its material seems to be of a superior quality, and the forging throughout perfect. But the most remarkable feature in the piece of iron is its arched upper surface, the ends being 8 inches, and the centre 11 inches, an arrangement of parts by which the highest mechanical strength was secured without any unnecessary waste of material. This displays an amount of knowledge of the laws of force and resistance on the part of the engineers which is highly creditable to them.

Wood.

In a country so infested by white-ants as Orissa, it is not surprising that wood has been so little used in the construction of the temples, though some of the finest woods of India, such as the teak and the sal, are so abundant everywhere. The only purpose for which wood was employed was for the making of doors, but, as most of the original doors have long since disappeared, and their places have been from time to time supplied by modern substitutes, it is impossible now to say how they were worked. The only ancient door now to be met with in Orissa occurs in the porch of the Great Tower of Bhuvanes'vara, and that is made of sandal-wood, divided into square panels, and carved in a diaper pattern somewhat like the patterns on the celebrated gates of Somanátha, now deposited in the fort at Agra. Mr. William Simpson, in a letter to the Editor of the *Daily News*, London newspaper, dated the 23rd December, 1871, doubts the gates to be those that were removed from the temple of Somanátha by Mahmud Ghaznavi. He says, "I made a very careful sketch of them, including details of the ornament. As I sketched, it struck me as strange [redacted] nothing Hindu in its design. It was all purely Muhammadan. Out of the thirty two millions of Hindu gods, there was not one of them visible." He adds, "It was only on my return to England, and in conversation with Mr. Fergusson, that I got confirmation of what I suspected. He agreed with me that the ornament was sufficient evidence that they could not possibly be the gates of Somanátha; but he added that the gates in the Diwán i khás at Agra had been inspected with a microscope, and they [redacted] 'Deodar pine,' and not of sandal wood. This fact, in spite of the proclamation" (of Lord

* Diodorus Siculus, speaking of the bridge which Semiramis built over the Euphrates, states that the stones were held together by iron clamps, the interstices of which were filled up with molten lead. In ancient Egypt the same practice was common.

Ellenborough) would command a verdict against them from any jury." This, however, it is to be supposed, would be to a great extent dependent on the nature of the jury, for were experts to be included in the panel they would not be able to join in the verdict so confidently expected upon the evidence adduced. The wood of the gate now at Agra has the colour, density (apparent), and grain of sandal wood; but admitting, for the sake of argument, that it is really not so, there is nothing to show that deodar pine, the wood especially sacred to the gods (from *deva* god and *dáru* wood), was inaccessible at Somanátha, and that the report regarding the original gates having been of sandal wood, founded on the evidence of Muhammadan writers, was not a mistaken one, resulting in the appearance of the wood. The character of the pattern (diaper) is simple enough, and the like of it may be seen in the Museum of the Asiatic Society of Bengal, engraved on the hafts of war-hatchets brought from the South Sea islands. It occurs likewise, slightly modified, on the panels of the Bhuvanes'vara temples, and it would require no ordinary amount of recklessness to say that the builders of Orissa in the seventh century and the South Sea islanders got it from the Muhammadans. The prospect of finding some one or more of the thirty-three million gods of the Hindu pantheon carved on door-panels was so fanciful, that few natives of this country will feel at all surprised at its having so completely disappointed the writer. I must have visited at least five thousand temples in various parts of India, but I do not remember to have noticed many door-panels with figures of gods carved on them, certainly none in Orissa. It must be added, however, that there is nothing but its decayed ancient look to show that the Bhuvanes'vara doors are synchronous with the date of the Tower.

Season for building.

Some of the Puráṇas, as also the *Mánasára*, give detailed descriptions of various kinds of wood adapted for use in making dwellings, the seasons when the trees which yield them should be felled, their respective values for different purposes, the ceremonies to be observed when proceeding to fell trees for obtaining supplies of timber, the mode of seasoning them, &c.; but as wood occurs but very sparingly in the buildings which form the subjects of this work, it is not necessary to notice them at length. The former, likewise, afford directions regarding the seasons and stellar conjunctions most favorable for commencing the building of temples and houses, and the ceremonies to be observed on such occasions. Thus the *Matsya Puráṇa*: "The man who commences a building in the month of Chaitra, earns ill-health; he who does so in Vaisákha gains wealth and jewels, but in Jyaistha, he encounters death. Should he begin it in the month of A'shádha, he will obtain slaves, jewels, cattle, and a good complexion. In Srávana, he will secure friends, and in Bhádra lose them. A house begun in A's'vina brings on the death of one's wife, in Kártika, the gain of wealth and corn, in Márgas'irsha, abundance of food, and in Pausha, the fear of thieves. It is ordained that the month of Mágha ensures gain and learning, but it also brings on fire; while Phálguna gives offspring, and gold. Such are the effects of seasons."* Of lunar constellations the following are described as the most appropriate, viz., As'vini, Rohini, Múla, Uttara A'shádha, Uttara Bhádrapada, Uttara Phalguṇí, Mriga-s'irsha, Svátí, Hasta, and Anurádhá.† Of the days of the week, Sundays and Tuesdays are injurious, the rest are appropriate.‡ Much weight is also laid on particular conjunctions, but as these cannot be made intelligible to European readers without entering into tedious details, I shall not quote them here. The *Hayas'irsha Pancharátra*, a Tantra of the Vaishṇavite class, has also some rules on the subject; but they are scarcely worth noticing. According to it the rainy season is the most inappropriate, and no building should be commenced in it. The first ten days of the wane, the second five days of the waxing moon, the 4th, the 9th, and the 14th of both the wane and the waxing moon, are also said to be reprehensible.§ It differs from the last authority, however, in rejecting only the Sunday, and not also Tuesday, and approving of some of the Nakshatras which the former condemns.

Ground fit for building.

The Matsya Puráṇa affords detailed instructions for the selection and examination of the ground for building. Earth is divided by it into four classes according to its colour; the white is called Bráhmaṇa, it is said to have a sweet taste; the red is Kshatriya, and it produces an astringent taste in the mouth; the yellow is Vaisya, it is hot and astringent to the taste; and the black is S'údra; it is also astringent and hot. The merits of these different kinds of earth as substrata for buildings, or as materials for brick-making, are reckoned according to their caste, the Bráhman being esteemed the best, and the S'údra the worst.

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* चैत्रे व्याधिमवाप्नोति यो यत्नं कारयेद्गृहं।
वैशाखे धनरत्नानि ज्येष्ठे मृत्युं तथैव च॥
आषाढे भृत्यरत्नानि पशवश्चैवमश्नुयात्।
श्रावणे मित्रलाभं तु हानिं भाद्रपदे तथा॥
धनोत्पत्तिं चाश्वयुजे कार्त्तिके धनधान्यकं।
मार्गशीर्षे तथा भद्रे पौषे तस्करतो भयं॥
लाभस्तु माघमासे विद्यादग्निं मासे विनिर्दिशेत्।
कार्श्यं फाल्गुने पुत्रादिनि कालवर्षं शुभं॥
Matsya Puráṇa.

† अश्विनी रोहिणी मूलमुत्तराषाढमेव च॥
स्वाती चैवानुराधा च प्रशस्ते प्रथमे क्षणे॥
Matsya Puráṇa.

‡ आदित्यभौमवर्जं च सर्वे [illegible] मासवद्या॥
Matsya Puráṇa.

§ शुक्लपक्षे च चारभं वर्षाकाले विवर्जयेत्।
कन्यापत्नीविमाशाके शुक्लादौ दिनपंचके॥
चतुर्थी नवमी चैव त्रिविधापि चतुर्दशी।

Before commencing a building, the proper course is to dig a hole, measuring in every direction an *aratni*, or a cubit from the elbow to the end of the little finger. This being afterwards carefully plastered with mud, a saucer is to be filled with ghi, provided with four wicks on four sides, and placed on the bottom of the hole. The wicks being now lighted, if they burn uniformly and brightly, the ground is fit for building; otherwise it is bad. Another and more practical and intelligible method is to press into the hole the earth excavated from it; if the earth should fill up the hole and leave a surplus, the ground is good; if it should barely fill it up, but leave no surplus, the ground is indifferent; but if it should prove insufficient, the ground is positively bad.* The prevalence or absence of particular kinds of trees, and the readiness or otherwise with which seeds sprout when sown in the ground, are also held as tests of its fitness for building upon.

After selecting the land great attention should be paid to remove whatever bones it may contain; for bones, particularly those of Chandálas, are reckoned to be highly injurious to buildings. If no bones are found, and still there should be any suspicion of the presence of any such offensive matter, a ceremony has to be performed named *Sailyoddhára*, which is esteemed as highly effectual in neutralising the evil effects of bones under a building. Certain ceremonies have also to be performed before and after the completion of a building, of which an interesting account, by Bábu Pratápachandra Ghosha, will be found in the Journal of the Asiatic Society of Bengal for 1870, p. 199 *et seq.* A summary of it here is scarcely needed.†

Removal of bones.

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* पूर्वे भूमि परीक्षेत पश्चात् वास्तु प्रकल्पयेत् ।
चेता रक्ता तथा पीता कृष्णा चेत्यनुपूर्वशः ॥
विप्रादेः प्रथमे भूमिरसः काथे परीक्षणं ।
द्वियाणां मधुराम्लादा कषाया चथियस्य च ॥
कषाये कटुका तद्वैश्यस्यैव प्रथमे
चरजिमाणं पैतले अनुस्त्रिणं च सर्वतः ॥
इत्यमामरवाक्यं ज्ञात्वा परीक्षेदनुपूर्वशः ।
ब्राह्मणादिपुरोधाय पूर्वं सत्र सर्वदिक्षुच ॥
दीक्षा पूर्वादि दक्षीशान्तेशानमनुपूर्वशः ।
वास्तु सम्पूजितो नाम दीक्षने सर्वतस्तु सः ॥
शुभदा सर्ववर्णानां शान्तदंष्ट्र सदेषु च ।
चरजिमात्रक दर्ग परीक्ष्य यातपूरणे ।
ऋषिके पिप्पलाप्रोक्ति मूले चार्थि सम सर्म ।
इति मात्स्ये ।

† With reference to the remark made on page 33 to the effect that minor Hindu temples face one or other of all the four cardinal points of the compass, it is necessary to note here, with a view to prevent misapprehension, that the *Chandimandapas*, or chapels in private dwellings in Bengal, face either the South, or the West, never the East, nor the North, and the priest, when engaged in worship, invariably sits with his face towards the East, facing the image of the god, when the chapel is turned towards the West, and having the image on his left side when its direction is towards the South. This is, however, not in accordance with the rules of the Sástra. According to the *Kálikú Purána* "the side sacred to Kuvera (North) is the most gratifying to Śiva; therefore, seated with the face directed to that side, should Chandiká be always worshipped." *Digvibhágetu kuverdikk sivaprítí dáyini, tathá tanmukha ásina pújayechekam-dikám sadá.* At Puri and Bhuvanes'vara, with temples facing the East, the priests, I observed, were seated with their faces towards the South. This too is not consistent with the ordinances of the Sástra, for the *Rudra-yámala Tantra* prohibits the East for S'aubhu, and the West and the North for S'ákti. *Na prachimogatah s'ambhor nodichim s'aktimasthitam, na pratichim yatah prahlhamatodakham sambhavet.* How the priest sits when a temple faces the North, I have never noticed. When people sit to repeat their sandhyá prayers, they turn towards the East, if the worshippers be Vaishnavas, and towards the North if they be S'áktas. The followers of S'iva and Ganes'a prefer the North. This likewise is arbitrary, and unsupported by the Sástra. The general rule, according to Vishnu, is that the worshipper may sit with his face towards the North or the East at his option. *Prañmukho udañmukho vá uparisthó dhyáni devatáh pújayet.* Váchaspati Mis'ra quotes an authority which improves upon this, and recommends the East for morning prayer, the West for evening prayer, and the North for prayer at night. *Prák pratyag udagdyát ta ahyam-prátar-nis'idan cha.*

CHAPTER III.

Architectural Details and Sculpture.—Trammels of orders and styles. Unity of Indian art. Situation, the first element of beauty in architecture, —how regarded by ancient Indians;—neglected in the present day. Tanks. Magnitude, the second element of beauty; how adventitiously increased. Solidity and massiveness. Basement. Crests for mouldings. Battlements. Mouldings for plinths. Walls and pilasters. Pillars. Cornices. Various kinds of Mouldings. Bands and fascias. Weather-moulding. Coats of Arms. Eccentric ornaments. Brackets. Bosses. Finials. Lotus. Quality of floral designs. Do. of figures of animals. Do. of the human form. Schools of Dædalus, of Egimitus, of Egypt, of Assyria and of Orissa. Merits and defects of Orissan human figures. Features. Relative proportions of the different members of the human figure. Relief. Groups. Drapery. Obscenity of Orissan sculptures; its cause. Sculptures carved in *situ*. Toreutic art.

"IN architecture, as in all other operative arts, the end is to build well," says Sir Henry Wotton; but this is a maxim which cannot be adopted in the present day without a multiplicity of qualifications. It implies a freedom from restrictions of orders and styles which even Gothic architects with their "disregard of precedent and untrammelled wildness of imagination,"* could not command. To the Uriyás it was a license not to be thought of. The ordinances of the *Silpa Sástra*, which claimed a sanctity next to the Veda itself, hemmed them on every side, and left little room for the play of the imagination in the design of their temples.† The ground plans, the forms, the proportions, had all to be regulated by rigid rules and inviolable canons, and they had scrupulously to abide by them while yearning to produce something that would be at once grand, imposing, and lasting for ages. Ornamentation was the only branch of the art which was left entirely to their fancy, and they gave free vent to their constructive faculty and taste to the development of an endless variety of decorative designs. Hence it is that in the midst of one unbroken monotony of form in India, the observer is charmed by a profusion and richness of ornaments which has nowhere been surpassed. Indeed, ornamentation has always been, so to say, a passion with the Hindus. To quote the language of Mr. Fergusson: "Like all people untrammelled by rules and gifted with a feeling for the beautiful, they adorn whatever they require, and convert every object, however utilitarian in its purposes, into an object of beauty, knowing well that it is not temples and palaces alone that are capable of such display, but that every thing which man makes, may become beautiful, provided the hand of taste be guided by sound judgment that never forgets what the object is, and never conceals the constructive exigencies of the building itself. It is simply this inherent taste and love of beauty, which the Indians seem always to have possessed, directed by unaffected honesty of purpose, which enables those who are now without independence, or knowledge, or power, to erect, even at the present day, buildings that will bear comparison with the best of those erected in Europe during the middle ages."‡ It is to be remarked, however, that even in this passion for ornament, and the diversity and profusion to which it has led, there is a marked unity of design. Whether in the North, or the South, in the peninsula of Guzerat, in the West, or the sea-shore of Orissa, in the East, the same general principles of decoration prevail every where. It is not to be expected that in their quality and execution they should always be alike, but their general character is the same in all places. The corbels, the medallions, the panels, the mouldings, and the scrolls in the temples of northern India and Orissa, are all closely similar to those in the Tamulian structures of the South. The same forms, the same figures, the same proportions, however variously combined and elaborated, turn up wherever the observer directs his eyes, and they display a community of thought and inspiration on the part of the builders which could not have resulted unless the Tamulians and the Aryans had drawn from one common source. Hence it is that the *Silpa Sástras* as current in the North and the South are alike, and the canons of the *Manasára* are reproduced unchanged in the works of Tamulian authors.

The first element of beauty in a building is due to its situation. It would be a truism to say that a plain structure s[illegible] in a romantic spot appears far more picturesque than a really beautiful edifice buried in the midst of a towering mass of masonry surrounding it on every side. None who has seen the

Situation.

* Fergusson, History of Architecture.

† The ancient Egyptians, who resembled the early Hindus so closely in their manners, customs and habits of life, were equally restricted in their architecture. "Plato and Synesius both mention the stern regulations which forbade their artists to introduce innovations in religious subjects; and the more effectually to prevent this, the discretion of artist was not allowed to be exercised by common or illiterate persons, lest they should attempt anything contrary to the laws established regarding the figures of the deities." Wilkinson's Ancient Egyptians, III. 87.

‡ Handbook of Architecture, I. p. 123.

elaborately-sculptured, gold-covered fane of Vis'ves'vara at Benares, overshadowed on every side by lofty dwellings, and the simple unadorned temple on the Jangirah rock near Bhágalpur, rising like a beacon tower in the midst of a wide expanse of water, can for a moment deny the influence of place, in the development of beauty in buildings. The ancient Hindus paid particular attention to this subject, and generally selected the most prominent spots accessible, ordinarily beyond the boundary of a town, or village, for the erection of their temples, and there is scarcely a romantic spot in India, in forests or on hill-tops, on islands or rivers, which has not been consecrated to some presiding divinity or other. Where a commanding situation was not available, or from other causes, an urban site was deemed necessary, they cleared out the place selected so as to have sufficient space round the proposed temple, and to keep it perfectly unencumbered and detached. The same rule was also laid down, though probably not always observed, in regard to private dwellings. With a clear eye to effect it was also ordained that temples and houses should not be placed on any one corner or side of the area selected, or on its exact centre, but so located as to leave more space in front than behind. The space on the sides should be equal. According to the *Vrihad-rája-mártanda*, the building should not cover more than one-ninth of the total space;* but other authorities are less imperative. The *Hayas'irsha Pancharátra* condemns the sinner who ventures to build in close proximity to an existing temple. In Orissa these rules were formerly strictly observed, and the temples were so built as to leave lots of open space all round, more in front than on the sides. The desire, however, of dedicating temples on spots hallowed by the sanctity of ages, and the cupidity of the officiating priests, have, in later days, completely set those rules at nought, and the court-yards of temples are now so crowded with numberless structures of various kinds and qualities, that it is often difficult to get a clear and complete view of the principal edifices from any one side, and their æsthetic effect is completely destroyed. At Bhuvanes'vara some of the finest carvings and sculptures are completely covered by dead walls and thatched huts.

The *Rájamártanda* recommends a tank to the East or the North of the building, but I do not remember to have noticed any such within the temple enclosure in Orissa. Without, they are not only common, but seem to have been originally held as an absolute necessity. Every large temple has its appropriate tank, on whose water is largely reflected the sanctity of the presiding divinity. They are evidently due as much to the necessity of excavating materials for the temples, as to a desire to secure an ornamental, and at the same time a most useful, appurtenance to the sanctuary. Adverting to the attention paid to tanks by the people of this country, Mr. Fergusson observes: "Indeed, there is scarcely a tank or stream in all India that is without its flight of steps, and it is seldom indeed that these are left without some adornment, or some attempt at architectural display, the proximity of water being always grateful in so hot a climate, and an especial place of favourite resort with a people so fond of washing and so cleanly in their habits as the Hindus."†

Tank.

But to turn from the adventitious to the innate: "the first and most obvious element of architectural grandeur," says Fergusson, "is size,—a large edifice being always more imposing than a small one; and when the art displayed in two buildings is equal, their effect is almost in the direct ratio of their dimensions."‡ This size or magnitude affects human feelings according to the direction from which it is seen. "Magnitude in height is expressive to us of elevation, and magnanimity; in depth of danger or terror, and, from our constant experience, of images of terror; in length, of vastness; and in breadth, of stability, and when apparently unbounded, of infinity."§ Orissan architects, were fully aware of the importance of these principles, and tried to utilise them in the erection of their sacred edifices; but, owing to the peculiarity of the style they adopted, they never acquired the same success, which their neighbours, the Tamulians, achieved. A single square chamber, for obvious engineering reasons, can never be of any extraordinary magnitude, either in height, or in its length and breadth; the utmost limit is soon attained, and as the height must be proportioned to the base, the edifice must, to a certain extent, be wanting in such majesty and grandeur as are attainable by large dimensions. To remedy this evil, secondary buildings were attached to the principal temple, so as to cover a large area, and overcome the eye by a great expanse; but as they were never blended into one, they failed to fulfil their object. They look detached and separate, and, instead of heightening the effect of the principal struc-

Height.

[illegible] congruity.

* भवेच्छुभं सूत्रं धृतं यत्नतु हस्ते विचक्षणः।
भवेत् भूमिभागे तु सूत्रं कृत्वात् त्रयात्मकं।
न कोणे च सूत्रं कृत्वात् नाग्नेये न च सम्मुखे।
पृष्ठतश्चैव शिरे सूत्रं सूत्रच्छेदस्तु दुःखदः॥
सूत्रेणैकाय सर्वेषां लिखितं नियमं प्रभुः।
सूत्रं विधाय भागे वि प्रमादाद्विघ्नं यदि॥
ऋषिरेवेव वास्तेन सदुःखदो विघ्नमं प्रभुः॥ Vrihadrájamártanda of Bhoja Devs. As. Socy.'s MS. No. 78, fol. 50. "The intelligent, holding a string divided into nine parts, and laying the foundation carefully, should build his house on one of the nine parts. But it should not be in a corner, nor on one side, nor in the middle. On an auspicious day, during a good conjunction of the stars, the wise lays the foundation of a house."

† Handbook of Architecture, I. p. 126.

‡ History of Architecture, I. p. 11.

§ Alison's Essays on Taste, p. 171.

Another and a more effectual remedy was "to increase the apparent dimensions of a building by a scientific disposition of the parts, and a skilful arrangement of ornament, thereby making it look very much larger than it really was."* As the temples had to depend upon their height for their grandeur and effect, the builders not only carefully avoided cornices and continuous commanding horizontal mouldings, but so arranged the projections as not only to remove the baldness of dead walls by an agreeable play of light and shade, but to enhance the apparent height by a series of vertical, or upright, lines and forms. The plinths were broken by deep and strongly marked projections; the piers and pilasters were made narrow and tall; the architraves were so designed as nowhere to offer a continued, or unbroken, line; the façades were attenuated by repeated canting of the corners of projections, and other devices; the niches were narrowed and elongated; the mouldings were made to tend upwards; and the sculptured ornaments were to such an extent forced to the vertical position that even figures of lions and elephants had to stand in an unnatural erect posture like men. In short, the composition is throughout vertical, or, so to say, of the perpendicular mediæval Gothic ordinance, as opposed to the horizontal composition of the Greeks and the Romans. The artistic effect of this arrangement is most advantageous; the eye of the observer is always directed upwards, and temples of even moderate size look lofty, towering, and highly imposing.

Vertical style.

This impression is farther greatly heightened by the solidity and extreme massiveness of the temples. According to the verse quoted above from the *Agni Puráṇa*, (*ante*, p. 27,) the walls of buildings should occupy four-tenths of the area, leaving six-tenths for the space of the room. This rule assimilates to a great extent with the practice of the architects of Egypt, Greece and Rome; but in the principal temples of Orissa it is greatly exceeded. Indeed, the excessive solidity of Orissan piles implies, either a sad want of constructive ingenuity, or an unnecessary and most lavish waste of materials. But the end directed the operation of their builders, and that end was, next to what Professor Lübke describes architecture to be, "the æsthetic manifestation of the law of gravity," the greatest stability for that peculiar form of building which Uriyá art could attain—a stability which should not only rise above the atmospheric influence of the Indian climate, and defy its tremendous elemental commotions, but rival even the eternity of the divinity whose fanes the structures were intended to serve, and firmly to impress that idea on the imagination of the beholder. With such an end in view it is not remarkable that constructive elegance and economy of materials, should have been looked upon as questions of secondary importance. That it was not the result of want of ingenuity is evident from the comparative lightness of the Dancing halls, Gateways and other structures of the time. The following table shows the relative proportions of the chambers and the walls of some of the principal temples of Orissa. The measurements are rough, and must be taken as only approximate:—

Solidity.

Name.	Outer measurement.	Inner measurement.	Total area.	Area of room.	Ratio of solids to the total area; in decimals.	Ratio of room to the total area; in decimals.	Nearest vulgar fraction.
Bhagavati,	38 × 38	13 × 13	1,444	169	·882	·117	1/8
Great Tower,	66 „ 60	42 „ 42	3,960	1,764	·554	·445	4/9
Rames'vara,	34 „ 34	16 „ 16	1,156	256	·778	·221	2/9
Paraśu'rámes'vara,	20 „ 20	11 „ 9	400	99	·752	·247	1/4
Yames'vara,	22 „ 22	12 „ 12	484	144	·702	·297	1/3
Kapiles'vara,	20 „ 16	9 „ 9	320	81	·746	·253	1/4
Rájarání,	32 „ 25	12 „ 12	800	144	·820	·180	1/5
Muktes'vara,	14 „ 14	6 „ 6	196	36	·816	·183	1/5
Puri,	73 „ 73	29 „ 29	5,329	841	·842	·158	
Śáridul,	24 „ 22	12 „ 12	528	144	·727	·272	
Somes'vara,	23 „ 23	11 „ 11	529	121	·772	·228	
Ananta-vásudeva,	26 „ 26	16 „ 14	696	224	·678	·322	1/3

In Rám Ráz's work on the architecture of the Hindus, forty different designs are given, from the simplest to the most elaborate, and ornate, for pedestals and bases of pillars. In Orissa most of these have been employed, either intact, or variously combined, in the ornamentation of the stereobate.

Basement.

* Fergusson's History of Architecture, I. 11.

They all begin with a thick rectangular projecting base-moulding called *upána*, corresponding exactly with the plinth of the European orders. Over it occurs either a thin receding tile of the same description, or a quirked cyma-recta in a reversed position, covered by a thin tile. The plinth and the tiles are invariably left plain, without any carving on their face, but the upper edges of the tiles are frequently broken by small projections, shaped like lancet-heads, and placed at long intervals. (See woodcut No. 20.) At Benares these are called *rámarekhás*, and are most extensively employed in the ornamentation of all flat, horizontal mouldings. In Orissa they are used in conjunction with both flat and rounded members, and project either upwards, or downwards, or both upwards and downwards at the same time, serving the purpose of crests in the former, and of cusps in the latter, position. In upper mouldings they are richly carved. In plain work they spring from the moulding and form an unbroken part of it, as shown on the upper side of the woodcut; but when decorated with carving, they are entirely independent. Some plain ones are also so represented as to appear separate from the band on which they are placed. (See the lower part of the woodcut.) On the ledges of sloping roofs and cornices they serve the purpose of finials. Everywhere they constitute the most marked and characteristic feature of the ordinance, and there is not a single ancient temple in Orissa where they are wanting. When ornamented, they have generally a scroll or beaded border, with men, animals, or flowers, in the middle. Sometimes they are so shaped as to look like what in Gothic architecture are called crockets. Ordinarily in general appearance they are very like miniature Saracenic battlements, and if enlarged and brought into close proximity, they would no doubt serve the purpose of those ornaments. This arrangement is actually seen on the outer wall of the Puri enclosure, and there the lancet-heads are sufficiently enlarged to form regular battlements. The wall, however, cannot be taken to be of the same date as the temple, as the priests have a tradition that the Marhattas rebuilt that part of the wall which has large battlements, and the other portion may, likewise, be the result of a previous attempt at improvement. Among the ruins at Konárak I noticed several large battlements, each formed of a single stone, measuring 2′ 2″ by 1′ 8″ and having a flat band round the edges in front; but they were not *in situ*, and I could not satisfy myself as to the position they had formerly occupied. It is well known that the Marhattas transferred large quantities of building materials from Konárak, in the middle of the last century, for the erection of the refectory or Bhogamandapa at Puri, and it is possible that the battlements were carried at that time for use at Puri. They are exactly of the same pattern as those on the eastern wall of the Puri enclosure. The doubt regarding the origin of the Puri battlements is, however, immaterial to the question at issue, *viz.* as to whether the Hindus ever built battlements on the top of their walls and cornices, for the triangular and pyramidal battlements to be met with at Udayagiri and Sánchi (*vide ante* p. 17, woodcuts Nos. 1 and 2) leave no room for doubt on the subject; and the transition of the straight lines of triangular battlements of Udayagiri into the curvilinear ones of Puri is so easy, that a Saracenic theory is not at all needed to account for it.

No. 20.

The moulding, which, for want of a better name, has been called a "quirked cyma-recta," is formed of the sections of two circles like the letter S slanting towards the wall thus ∽, and has its surface carved into a series of lotus petals, whence its distinctive name the "lotus moulding," *padmabandha*. Sometimes its surface is cut into the form of a check, or beaded, pattern.

Over this, the wall rises straight upwards, from two to four or five depths of the plinth, and forms the dado, the *kanthá* of the Sanskrit writers. In some highly decorated temples the surface of this member is divided into panels, and filled with carvings; but generally it is left bare. At Benares it is reduced to a narrow neck (*gulá*) from a half to one-fourth of the thickness of the plinth. But whether reduced or not, it is followed by, first, a projecting flat band and then a cyma in exact correspondence with the lower moulding of the dado. The builders of Benares omit the tiles or bands above and below the dado, and, counting the dado, the two cymas, which with them becomes almost straight sloping surfaces, and the bands above and below them, make a *panchthurá* or a course of five mouldings; and this is repeated two or three times with a few intervening bands to complete the stereobate. This produces a very jagged appearance, with interminable narrow lines, highly offensive to all sense of elegance and beauty. The Orissans did not approve of it, and when they repeated the fivefold course, they brought back the projecting plinth, and carved its face in various designs, or, paring off its edges, converted it into either plain or ornamented. The plan, however, which pleased them most, was to convert the stereobate into a series of stylobates, corresponding with the projections of the wall, and to carve them into solid, rounded, lobed figures like dumpy pitchers, which are called *kumbhas*. The base of the Great Tower at Bhuvanes'vara is carved in this way, each stylobate having a double set of *kumbhas*. Over these the fivefold moulding is produced in two or three courses until the necessary height of the basement is completed.

Rám Ráz notices for pedestals, an ornament named *capota*, or the "parrot head;" but it has not been met with in Orissa, its place being generally occupied by the lancet-headed crests noticed above.

Walls and pilasters.

The surfaces of the piers are, as already stated, broken into a number of pilasters, or engaged pillars, having intermediate panels, or niches, filled with bas-reliefs or statues. The pilasters are of various sizes and proportions,—generally most elaborately carved and decorated, and the panels and niches have the most sumptuous bands and mouldings carved around them. In small temples these pilasters are generally, but not invariably, carried up the whole height of the body; but in large structures they are so arranged as to give to the wall the appearance of two or three stories, each having its separate rows of pilasters, niches, panels and blind doors. The artistic effect of this arrangement is remarkable. It helps greatly to diversify the appearance of the wall, and prevent all unnatural elongation of niches, panels and pilasters, and the æsthetic defect of placing niches over niches within one intercolumniation, or having too much bare space over them. These members are merely architectural or ornamental; they do not, to any material extent, enter into the constructive economy of the temples, nor contribute much to their stability; it is not remarkable therefore that their size, make, and strength bear no relation to the size of the building to which they are attached. The builders were no doubt guided by some principles or rules in the distribution of these ornaments, but in the midst of unlimited profusion and variety, it is now difficult, if not impossible, to make them out. The pillars and pilasters range from the most heavy and bulky to the most slender and delicate possible; the intercolumnar spaces vary from one to many diameters of the pillars, and the niches are of various sizes and patterns, though always rectangular. To describe them all in detail would be tedious and ineffectual. I must refer the reader, therefore, to the accompanying plates for an idea of the different styles in which pilasters and pillars are decorated, and the manner in which the walls are generally diversified. Illustration, No. 2, gives an elevation of the west face of the Kapileśvarí Temple, and Illustration No. 3, of the southern façade of the Jagamohan of Muktesvara, two of the most beautiful of the minor temples of Bhuvanesvara. Illustration No. 4 A, represents an attached pillar, or antis, on the exterior of the Muktesvara Jagamohan. It has a round lobed pitcher-shaped base, and capital, with a slender shaft, divided into three segments, of which the lower two are four-sided, bearing on the front of the lowermost section a danseuse, and on the next, two lions mounted on elephants: the third is rounded, and has a female figure in front, whose nether half is formed of a serpent which coils round the shaft above the head of the figure. The head is protected by the spread hood of a five-headed cobra. A modification of this style of pilaster occurs in Illustration No. 7 A, from the temple of Bhagavatí. In it the most prominent figure is a lion standing erect over a mounted elephant, and the capital has two nude females for ornament. The semi-ophide figure on the first pillar is called *Nágakanyá*, or "ophidian nymph." Sometimes two such figures are twined round each other on each shaft, and representations of the kind are very common in different parts of India. They are no doubt the congeners of the semi-piscine Triton of Greece, or the mermaids of Europe, Assyria and Persia, and intended to represent emblematically the descendants of the Nága race; but it is remarkable that their counterparts are not unknown in other parts of the world. In a Chinese book entitled "The Great Cloud Wheel Rain asking Sutra," and noticed by Mr. Fergusson, there are four representations of a serpent god,* each of which has "a human head and body, ending in a serpentine form from the waist downwards, but with the much more characteristic accompaniment of a degenerate serpent hood. In the first figure in this Chinese work, the Nága has three serpents rising behind its head; in the second, five; in the third, seven; and in the last, nine serpents. The lower extremities of the first and second are spotted like serpents, and the fourth" (the one copied in Mr. Fergusson's work)—"has scales more like those of a fish."† Commenting upon these Mr. Fergusson observes: "In India between the third century B. C. and the thirteenth A. D. we find serpent hoods ranging from three to seven heads, but never the human body terminating in a serpent downward, till after the last quoted date."‡ This conclusion, however, appears open to objection, as there are some pillars in the Great Tower of Bhuvanesvara, which dates from the middle of the 7th century, on which the characteristic semi-ophide female figures are most elaborately sculptured. It is impossible to make out from flat drawings whether the serpents shown in the Chinese drawings are intended to represent separate animals, or numerous heads for the tail from which the human figure comes out. In India polycephalous cobras are always intended, and not so many separate animals as there are heads. The taste displayed in this monstrous representation cannot but be severely condemned, but the tact and talent with which it is executed in Orissa is worthy of praise. It may be added also that bad as the conception is, it is not worse than that of the Pan[illegible] and the Triton, the Centaurs of the Greek artists, or that of the Apollo and Daphne of Bernini of the 17th century, in which floating tresses and the ends of the fingers and toes of a lovely maiden are "all sprouting forth in elaborately executed laurel branches and leaves."§

Of pilasters, Illustrations Nos. 4 B, 5, 6 and 7 B, offer very rich and typical examples. The first is from the exterior of the Jagmohan of the Great Tower. It is of a square make with a flat band-like projection in front along the middle.

* Tree and Serpent Worship, p. 52.
† Tree and Serpent Worship, p. 53.
‡ Loc. cit.
§ Westmacott's Handbook of Sculpture, p. 312.

Its surfaces are decorated with scroll work enclosing small figures of animals. The second is attached to the northern side of the Tower itself. It has a female figure on a panel on the front of the capital, resting on one knee, and supporting the abacus on her uplifted hands. It is the most florid specimen of the flat pilaster that has been met with at Bhuvanes'vara. No. 6 is a variety of the last. It has been taken from the north-east corner of the Muktes'vara Jagmohan. In it the female supporter of the abacus is replaced by a stout muscular dwarf who groans under the weight resting on his head and hands. Its base has the typical pitcher, and the shaft, flat projections, making it thereby many-sided. No. 7 B. is in many respects similar to No. 4 B. It occurs on the temple of Bhagavatí in the Bhuvanes'vara enclosure.

Pillars.

Looking at the beauty and elegance of these pillars and pilasters, it is difficult to account for the almost total absence among the Uriyás of a columnar ordinance, which seems never to have struck them. Once only they attempted it, when erecting the refectory of the Great Tower of Bhuvanes'vara; but they failed. The pillars they raised, proved too light and weak for the superstructure, and they had to fill up the intercolumnar spaces with solid masonry to secure additional strength. At Puri the Muktimandapa is an open pillared chaultry, but it is probably of a much later date than the temple near which it is placed; and, as it is, it is a most unsuccessful attempt at building a chaultry. Its pillars, though monoliths of black chlorite, are of an inordinately heavy appearance, having the most clumsy and ungainly bases and capitals (Illustration No. 10 B). They bear no relation to the ornamental attached pillars noticed above. The pillars used internally in porches and dancing halls, are invariably of a thick massive square make, all but totally devoid of ornament; the only decorations used being a few plain mouldings. They rise from a naked plinth, and terminate in a similar square tile or abacus, serving the purpose of a capital. The shaft measures from $3\frac{1}{4}$ to $7\frac{1}{4}$ lengths of the thickness. Considering that the attached pillars and pilasters are generally exceedingly beautiful and ornate, it is certainly remarkable that these detached internal pillars should be so bald and unattractive; but bearing in mind the heavy roofs they had to bear, the builders had to forego ornament for the sake of strength. The following are the relative proportions of some of the principal pillars that have come under observation :—

	Shape.	Total height.	Total base.	Total shaft.	Total capital.	Diameter of shaft.	Ratio of diameter to shaft.
Muktimandapa, outer range,	Round.	9	1	4—6	3—4	2—7	1—70
Ditto, inner range,	"	9—5	1—1½	6—4	2—1	1—6	4—0
Nátmandir, Bhuvanes'vara,	square	21—3	2—9	13—3	5—3	4—0	3—07
Ditto, Puri, outer range,	"	11—0	0—6	8—4	2—0	4—4	1—77
Jagmohan Bhuvanes'vara, Exterior,	"	12—7	2—5	7—8	2—5	2—1	3—71
Ditto, Tower, ditto,	"	11—7	2—0	6—6	3—1	1—8	3—6
Bhagavatí Pilaster,	round	12—2	0—6	8—5	3—3	1—1	7—72
Muktes'vara Gate,	polygonal	9—4	2—0	5—1	2—3	2—2	2—31
Ditto, Pilasters of Jagmohan,	square	8—0	2—7	4—0	1—5	1—2½	3—33
Ditto ditto,	round	8—0	.....	.....	.....	0—7	.....
Monolith, Puri,	polygonal	.....	.....	.....	.....	.....	.....

In the ornamentation of the detached internal pillars, as already stated, the simplest mouldings were all that were resorted to, and no carving was ever thought of. But in the case of outer pillars, or pilasters, the architects followed a very different principle. Avowedly introduced as ornaments, the pilasters could be effectual only when they were carved and ornamented, and hence great pains were taken to make them as sumptuous as possible. Their length was broken by repeated bands, contractions and mouldings, and their surfaces were covered with a lavish profusion of carving of various kinds, including floral bands, lions, elephants and human figures in various attitudes. The lions were invariably placed in an unnatural erect posture to make room for them on the surface of a narrow pillar, and the elephants crouching under them, were so reduced in size as to bear no relation to the lions. Human figures are usually introduced as mere ornaments, but not as an integral part of the pilasters. They are mostly females, standing in conventional graceful attitudes, adorned most sumptuously with jewelry, but very insufficiently clad. Sometimes thick stout dwarfs are put on the capitals, and made to represent as supports of architraves; they serve also as supports of abacuses, ledges of domes, edges of roofs, and other projections; they are so placed as to appear distinct, and to some extent detached from the actual prop of the member. Nowhere in [illegible] has the gross enormity of converting an entire pillar into the shape of a human being, like the caryatedes and telamones of Greece and Egypt, been attempted,* and in this respect the Uriyás have displayed a better appreciation of the true principles of taste in architecture, than their more advanced brethren in other parts of the world.

Illustrations Nos. 8, 9, 10 A [illegible] 10 B, are typical representations of detached pillars. The first forms the side post of an elegant archway in front of the Muktes'vara Jagamohan. On the side of it is represented a portion of the low parapet

* In the Tamulian structures of southern India such caryatedes and telemones are common.

wall which runs round three sides of the sacred fane. Its panels are very elegantly carved, and it is surmounted by battlements which are closely similar to Saracenic ornaments of the kind. The second is from the Dancing Hall of the Great Tower of Bhuvanes'vara. It has a plain square shaft with a peculiar capital formed of a succession of square blocks, the lower edge of the topmost one being cut aslant from below upwards and outwards. The third occurs in the Dancing Hall of the Puri Temple. It differs from the last principally in the capital being formed of a single plain block. The last is *sui generis*. Its shaft is formed of a single block of chlorite, plain and rounded, with a capital peculiar to it. It occurs in a detached open chaultry in the south side of the Puri Temple, called Muktimandapa; but the chaultry is not synchronous with the temple itself. Looking, however, to the large number of costly pillars employed in its construction, it is to be supposed that the structure is of an early date. It is used as a lecture hall, where learned pandits assemble to expound the S'ástras for the edification of the faithful.*

The most favourite ornament for the base is the *kumbha*, or pitcher, and that for the neck is a series of garlands of flowers or pearls, hung from the mouths of lions, and festooned in graceful curves. The ornaments are so variously combined and so fancifully introduced, that it is impossible to make out from the specimens that have come under notice, the principle, if there were any, upon which they were introduced.

In works on architecture, mention is made of monumental columns having an unbroken cylindrical shaft from plinth to capital, and the As'oka Láts afford the most remarkable instances of structures of that kind; but in Orissa, they have nowhere been met with. The nearest approach to them is offered by the monumental pillars at Puri and Jájapur, and they are polygons of sixteen sides. The column in front of the Bhogamandapa at Bhuvanes'vara has a rounded shaft; but it is quite modern, probably not a hundred years old.

Cornice.

The temples of Orissa have nothing like a projecting cornice, designed to throw off the rain water from the walls, and the transition from the body to the steeple takes place either imperceptibly, or is marked by one or more flat bands,—rarely, and only in later structures, by a narrow neck. In highly ornamented temples, the capitals of the pilasters, terminating in a series of rings, mark the commencement of the steeple. The case is different with porches, dancing halls, refectories, and gateways: they have a deep cornice formed of oblong slabs projecting from 1½ to 3 or 4 feet. These stones are invariably placed horizontally, flat on the walls, and so built over as to keep them in their position without the aid of consoles, brackets, dentels, or other support of any kind. Indeed, in the whole range of Orissan porches there is not a single instance where any attempt has been made to strengthen the cornice by the gradual projection of the walls, or by a series of horizontal mouldings, or by the insertion of blocks at short intervals. In this respect the Orissan cornice of the Bhuvanes'vara era bears no relation to the Assyrian, Egyptian or Grecian cornices, which all rest on projections of some kind or other. At Benares this cornice of a single-stone projection is common, but there the stones are generally placed in a sloping position; but as the roof slopes inward into the form of a pyramid from the inner edge of the cornice, the structure appears weak and ungainly. Such is, however, not the case with the cornices of Bhuvanes'vara. There, aloft at a great height, they do not from below seem weak or ill-adapted. Nevertheless some of the cornice-stones of the porch of the Great Tower at Bhuvanes'vara, which project over 4 feet, and most of those of the Puri porch, though of considerable thickness, were apparently unequal to bear the weight placed over them, or, as the Pándás maintain, were knocked down by lightning, and when they had to be replaced, about two centuries ago, the builders found it impossible to keep the new slabs in their places without the aid of iron stays. These latter have since been covered over with plaster, and moulded into the form of caryatides, ugly and obscene, not at all in keeping with the general character of the ordonnance. Projections under three feet have nowhere yielded to the superstructure.

In ornamented porches, the edges of the cornice-stones are most elaborately sculptured, the design being either floral scrolls, or processions of men, horses, elephants, or geese. Occasionally they are divided into square panels, and filled with single figures, or groups of animals and other designs. But whether sculptured or left plain, they invariably have on their upper edge a number of the lancet-headed crests described above; and these form their most peculiar characteristics. The amount of sculptured work displayed on the edges of these cornices is sometimes immense. Mr. Fergusson, adverting to the cornice of the porch of the Black Pagoda at Konárak, observes: "All the faces of these twelve cornices are covered [illegible]si-rilievi of processions, hunting scenes, and representations of all the occupations and amusements of life. The immense variety of illustrations of Hindu manners contained in it may be imagined when we think that, with a height of from one foot to eighteen inches, this frieze extends to nearly three thousand feet in length, and contains, probably, at least twice that number of figures."†

* For specimens of various other kinds of pillars see Rám Rás's History of Architecture, Fergusson's History of Architecture, and Illustrations of Indian Architecture, Prinsep's Illustrations of Benares, Tod's Rájasthan, and Cunningham's Essay on the Indian Order of Architecture (Journal of the Asiatic Society of Bengal, Vol. XX). The pillars of the Khandagiri rock-cut caves will be noticed further on.

† Ancient Architecture of Hindustan, 28.

A regular frieze under the cornice is all but unknown in Orissa, the only exceptions being the friezes of the Brahmeśvara and Muktesvara temples; but the architrave over the pillars which flank the principal doorway is generally richly carved,—ordinarily with the figures of the nine planets,—occasionally with other designs; and the space above the architrave is not unfrequently made the repository of elaborate bas-reliefs.

Mouldings.

The principal mouldings used in Orissan temples are the *fillet* and the *astragal*, the former passing, by widening, into broad flat bands of which further mention will follow. The regular *cyma* of classical architecture (both the *recta* and the *reversa*) is also common. It has an easy, gentle, delicate curvature, very different from its Roman form of two semicircles linked together. By diversified combinations with the preceding, and with tiles, narrow necks, and the ovolo, it produces many exquisite forms. The *chain*, the *nebule* and the *nail-head* mouldings of the Norman style have nowhere been met with, and the *rose* and the *dog's-tooth* ornaments are invariably replaced by lotuses, open or in bud. The *hatched* and the *crenulated* mouldings may be seen in several places within the enclosure of the Great Tower, as also the *lozenge* and the *indented* forms, or what may be taken as such; but neither the *star* nor the *scallop*. Reference has already been made to the *guillochi* or interlacing circular moulding, (*ante* p. 17); but it is by no means of very frequent occurrence. The most common is the *pellet* or *beaded* moulding; it occurs almost everywhere, and, by differences in size and arrangement, assumes very diversified forms.

Sculpture.

The great strength of the architects, however, lies in the most sumptuous floral scrolls which they have designed on all their leading bands or fascias. They are as well designed, as skilfully executed, and they reflect the highest credit on the artistic taste and ingenuity of the designers. In arranging them on the temples, the main object of ornament has been very carefully borne in mind, and their disposition appears the most appropriate. Instead of forcing architecture to subserve the purpose of "a mere frame-work for the setting of delicate sculpture," the latter has everywhere been made to retain its subordinate position as ornament designed to set off the former. It certainly is in some places very florid, elaborate, and over-crowded, but still it appears subordinated to an end, and not rendered itself the end. The diversities in the style, character, proportions and arrangements of these sculptured scrolls are so great, that it is scarcely possible to do more here than point out a few of the leading characterstic varieties. Their general outline is often alike, a winding or undulating scroll, inclosing more or less rounded spaces for flowers, leaves and animals. The flowers and foliage are of various kinds, and some of them are evidently fanciful, for they cannot be compared to anything living that I know of. Illustration No. 11, is a characteristic specimen of a carved scroll. It is formed of a gigantic pothos branch, enclosed by two rows of pellets, with a row of lotus petals below, and the characteristic crest above, shaped like a seated human figure. It occurs frequently in the Muktesvara and the Bhagavatí temples. The drawing has been taken from a specimen in the Muktesvara. No. 12 from the last named temple is a variety of it of common occurrence, and No. 13, the most ornate form, is from the Parasuráméśvara temple. The vine is still the pothos, but the foliage appears arranged in a very graceful style, and is remarkable for the skill and taste with which it has been developed. As a specimen of scroll-work it will stand comparison with the finest sample of the kind of mediæval or ancient times. Illustrations Nos. 14 and 16, from the Great Tower, and 18 from the Rájaráni temple, show the same creepers, but the foliage is scant, and the loops formed by the stalk enclose men and animals of various kinds, such as antelopes, deer, hogs, bulls, buffaloes, rabbits and the like; cranes, hogs and deer prevailing. In the first two, the pellet occurs on one side only. No. 20 from the Bhagavatí temple exhibits the same vine and foliage, but encloses, within the rounded folds of the stalk, little pigs and heads of elephants. The leaves in No. 21 from the Sáridewl are different; the plant appears to me to be a succulent Cucurbitacea, but the style is very much the same. In general character, No. 22 from the same place corresponds with the preceding; but it includes leaves and flowers of several kinds, as also a tiger, an animal of rare occurrence in Orissan sculptures. These are all employed for both horizontal and vertical bands, and used principally round door-ways and niches. No. 15, from the Parasuráméśvara temple belongs to this class, but the foliage is altogether different, and it is intended only for vertical mouldings. It may well pass for a scroll under a Roman frieze. No. 24 from Muktesvara does not show the pothos, nor make a creeper twine into loops, but masses the [illegible] in a rich, flo[illegible]de. Its lancet crest bears on its face an emaciated hermit and his disciple, engaged in a game of [illegible] over a folding table. The scroll is of rare occurrence, and is never carried to any great length, occurring only on brackets, capitals of pilasters, and tops of niches, supplying in the last position the place of a dripstone moulding. No. 19, from the Great Tower is a variety of this style, and on its crest is seen a monkey engaged in picking out lice from the head of a neighbour. In No. 23 from the P[illegible]śvara temple the scroll is formed of a creeper issuing from the tail of a peacock. The foliage is entirely fanciful, but most elaborately and richly executed. Round a lattice frame in the Muktesvara porch, No. 28, the foliage of the creeper is reduced to a minimum, and two stalks from opposite sides are made to form loops wherein gambol a num-

ber of monkeys and crocodiles in great delight. A monkey has got his tail caught in the fork of a branch, and is hanging down in pain, while another with an anxious look is coming forward to release him. One is happy, having mounted on the back of a crocodile, which is darting forward to escape from the unusual load. This frightens two juveniles, one of which is climbing up a branch in great haste, while the other, having got to a safe distance, is grinning at the sight of the fun. In a third group there is a domestic scene. Mater-familias is seated at her ease with a young hopeful in her lap, while one kind neighbour is busy picking out lice from her head, and another is occupied in the, to her, delightful task of eating them. In a fourth group a crocodile has caught a monkey by the tail which wriggles in great pain, while some good-natured companions crowd around, anxious, but unable, to help it. Altogether there are about two dozen groups of this kind, some including deer, elephants and other animals, and they have been designed and executed with a degree of skill, vigour, and fanciful spirit that makes them look more like the work of a modern French caricaturist than that of an old Uriyá of the 7th or 8th century. The original has suffered much from long exposure, and my sketch of it is an exact fascimile taken with a camera lucida, and must therefore appear rough; but as it is, were one to put it in a portfolio of Gustave Doré, or in Griset's "Grotesques," it would, I fancy, be easily mistaken for the handiwork of one of those humorous artists. No. 25, from Parasurámes'vara, drops the twining vine altogether, and is formed of a series of lozenges tied to each other by ribbons, and enclosing curly petaled flowers, apparently a kind of *passiflora*; the spaces above and below the knots are filled up with curled petals or stamens of the same species of plant. On the lower side it has a row of pellets, and below it a string of lotus petals supported on a hatched zigzag moulding. It is neither very rich, nor common. It is used only for horizontal fascias. No. 31, from the same place, discards the festoons of creepers altogether, and takes a line of pitchers, bearing unknown or fanciful tendrils, leaves and flowers. The lower half of the pitcher is ribbed, and a garland of beads or flower-buds encircles its neck. This fascia has a fillet for its lower, and a corbel table for the upper, edge. The corbels are formed of three square tiles each, the smallest occupying the lowermost place; no parapet or continuous covering is placed over them. A very florid example of the pitcher band occurs in No. 32, from the same locality. No. 26, is entirely different from the last. It has a corbel table of carved ornaments, supporting a deep continuous projection above. The projection has a cable moulding enclosed in a winding band of ornamented lace. Above the last, and enclosed by two rows of fillets, occurs a line of cruciated four petalled flowers, evidently the golden jasmine (*Jasminum fruticans*): the top is surmounted by a number of ornamented lancet-heads placed at short intervals. This moulding is of rare occurrence, and the only specimen noticed, was seen on the Muktes'vara temple. No. 17 from the Rájárání temple is even more singular. It is formed of a range of either cucurbitaceous, or solenaceous, pyriform ribbed fruits, or perhaps some flower buds strung together. No. 27 from Parasurámes'vara exhibits a combination of billets and pellets in a string-course. It has for its crest a peacock with a foliated tail similar to that in No. 23.

Of bands bearing only animals, a great number of specimens may be seen on the Great Tower and other rich temples. Nos. 29, 29A and 30 give examples of lines of elephants, and No. 34, of geese and goslings. The distinction between the old and young bird is well marked, and indicated with much spirit. Lines of horses, ducks and martial processions are likewise common; but I had no opportunity of taking their drawings. No. 36, from the Great Tower, represents a man singing to the accompaniment of a *dholak* which is being played upon by a woman; but in the attempt to put large figures in a narrow band, the artist has been obliged to resort to very distorted positions, and altogether to spoil the effect.

It would be as useless as tedious to describe in detail the manner in which these various ornaments have been combined and disposed, particularly as the plates annexed will appeal to the eye and mind much more readily and effectually than any description that I can offer. The bands are used both singly, and in combination, often three, four, or five different bands being placed side by side, so as to produce the most gorgeous effect. Round the principal doorways this combination of mouldings is carried to an inordinate extent, and in some places a dozen bands may be seen placed side by side, and eked out by the intervention of small bas-reliefs of men and animals. A remarkable feature in such cases is formed by two snakes twining on each other. The snakes are generally most carefully executed in black chlorite, and the effect is very agreeable. At the entrance to the Great Tower, a broad band about a foot wide, is formed of an elegant pothos vine coiled into loops, [illegible] which encloses a chubby little boy—a cherub without wings—disporting among the foliage. The design and execution of the juvenile figures are remarkably beautiful. They display a quiet grace, an artistic feeling, and a playful fancy which are deserving of every admiration; and this is the more noteworthy as Hindu artists are not particularly proficient in developing the human figure with a correct eye [illegible]ve. The sight of these cherubs recalled to my mind Sir Joshua Reynold's picture of Cupid sleeping on a cloud [illegible] Library of the Asiatic Society, as the fittest object of comparison, next only to a fat, handsome, healthy, living child of one year of age,—the most lovely object in creation. Unfortunately, how-

ever, for the taste of the artist of this elegant group, there is an adjoining band formed of square panels filled with ill-formed human couples in most disgustingly obscene positions. Counterparts of these two bands may be seen at the Konárak porch, but the execution of the cherubs there, is not nearly so good.

Weather-moulding.

The simplest weather-moulding for doorways, windows, archways, niches &c. is a flat projecting tablet formed of a single slab, occasionally enriched with pellets, beads, ovules or other small ornaments; but in decorated work, and particularly over the back ground of alti-rilievi, it is generally arched, having the inner edge foiled, and is elaborately ornamented all over. The keystone ornament for such an arch is ordinarily a lion's head, and when not placed on pillars, it springs from corbels, or brackets, of various designs. The back-frame of the statue of Bhagavatí in the Great Tower (Illustration No. 45) may be referred to as a characteristic example of this arch. Over the side doors of temples, the lion's head is generally replaced by the figure of a simple or eccentric circle ornamented with beads and other decorations, and flanked by men, women, monkeys, alligators and other supporters. These look the very counterparts of European coats of arms, the scalloped European buckler being replaced by the Indian circular or oblong shield. The position of the supporters in the two cases are exactly alike. Sometimes the shield is placed above the lion's head. A plain, but very neat, specimen of an oblong shield with two female supporters is shown in Illustration No. 46. Monkeys and crocodiles as supporters are common, and elephants are occasionally met with, but I do not remember to have noticed any deer, horses, unicorns, or lions. The ornament is highly effective, and the architects have taken great pains to place it on prominent and attractive places, particularly near the springs of towers and the pyramidal roofs of porches, as also over door-frames and hood-moulds. The eccentric circular figure referred to above, and represented on lancet-headed crests, and a variety of other situations, forms a peculiar and characteristic feature of Uriya art. It is formed of two, three, and rarely of four circles of different diameters, the lower peripheries resting on each other, but the top of the outer one, and not uncommonly of all the circles, opening like the mouth of a pitcher, or more commonly drawn out in a line like the stem of a glass bulb. It is to be presumed that it has a mystical meaning, and that of a phallic character, as it is closely similar in shape to the *yoni* which encircles the middle of the lingam. Illustration No. 38 from the Sáridcúl offers a characteristic specimen of the ornament.

Brackets.

Brackets are of frequent occurrence in all decorated temples; but never in the inside, as in mediæval European churches, for the support of statues, or the ends of the arched frameworks of roofs. They are used, as all ornaments generally are in Orissa, on the outside, either as springs for drip-stones, or as mere ornaments. They are variously shaped, sometimes nearly plain, or ornamented only with mouldings; but usually carved over into foliage or animals intertwined with mouldings. Illustration No. 40 from the Rájarání temple is an example of a very rich bracket of the lotus pattern. It is very common and particularly characteristic.

Bosses.

As ornamental stops or finishing to mouldings, or to cover them where they intersect each other, or to fill up blanks, bosses or pateras are of constant use. They are usually carved into human figures or heads, animals, foliage &c., or foliage combined with heads and animals. The designs are various, sometimes grotesque, but generally very pretty. Illustration No. 51 from Sáridcúl represents a parrot smoothing its feathers. No. 52 shows a turkey engaged in the same occupation. No. 50 gives the forepart of a boar, the body being covered by the leaf of a succulent cucurbitacea; No. 49 a rat seated on a flower and gnawing a fruit; and No. 57, a curious and ingenious piece of whimsicality, in which two heads, two pairs of arms, and two pairs of legs are so arranged as to build up four complete human, or quasi-human, figures. Each head and each pair of limbs are so placed as to do duty for two figures. The composition is peculiarly grotesque, but remarkably skilful. Nos. 53 to 56, show other and characteristic specimens. Rabbits and cranes are frequently introduced, but boars, sows and pigs appear to have been the greatest favourites, and their frequent presence suggests the idea that, though held highly impure in the present day, those animals were not objects of aversion when the temples were built. Nor is this a matter of surprise, seeing that Manu ordains the [illegible] of the wild boar as a choice article of food for both men and gods, and the Kshatríyas and the Rájputs in all quasi-independent states, as well as in [illegible] take a great delight in hunting the wild hog for food. In Bengal and the large cities of the North-West, where the [illegible]madan power [illegible] firmly established, and large Moslim populations had settled with the natives of the country, the [illegible] is most abhorred, and the inference follows that the hatred is due to a deference to the feelings of the conquerors, and not to any religious compunction of the natives. A neighbourly feeling of the kind has induced many Muhammadans of Bengal not only to abstain from beef, but to look upon it with a feeling of repugnance. The feeling was stronger before than it is now.

Finials.

Attention has already been drawn to the [illegible]marekhás lancet-headed [illegible], and in the plates which illustrate this work, many examples will be met with of the various [illegible] which they assume under different treatment, and how they often serve the purposes of finials. They are, however, by no means the only type of finials in use in Orissan temples. Foliated crests of various kinds are frequently introduced, and some of them are remarkably handsome.

hip-knobs in English architecture are occasionally met with, and so are little spires, somewhat like the spires of Gothic churches, but of very different designs. Illustration No. 39 exhibits a finial or spire of this description from the temple of Bhagavatí. It is a rich specimen of its kind, though somewhat heavy in appearance. It has a characteristic chaplet of aśoka leaves, to a Hindu the most appropriate emblem of the faithful wife,* for a pendant, and lotus petals for capitals; the scrolls being formed of a cucurbitaceous vine, very much modified by fancy. On its top, within a small circle, there is a peculiar ornament, apparently a flower bud, which I can liken to nothing so close as the ball flower of the Gothic architects—a form of floral design not uncommon in Orissa.

The lotus, as may be expected from the circumstance of its being the most gorgeous and handsome flower in India, is by far the greatest favourite, and in Orissa, as elsewhere, occurs everywhere and in various forms,—in bud, in a half-open state, and in full blown flowers. In some specimens, the attempt to delineate nature is very nearly successful, but a conventional form is what is generally adopted, in which single flowers of four, six, or eight petals are made to do duty for dense double blossoms. Pedestals of statues and footstools for goddesses are often formed of large multipetaled lotuses, but in such positions they are generally not so faithfully executed as in basso-rilievo scrolls, owing evidently to a want of proportion, their size and shape being regulated by the exigencies of their situation, and not by the relation they bear to man in nature. On the whole, however, these lotuses, as well as all floral designs, are carved with great tact and elegance, and if sufficient allowance be made for the coarse material in which they are developed, the attempt of the Orissan artist to represent vegetable forms will be readily acknowledged to have been much more successful than that of Egyptian and Assyrian sculptors. The superiority of marble over sandstone as a material for sculpture is overwhelming, and even very inferior carvings in it appear before the bulk of mankind with an amount of grace and beauty, which no other material can command. The most faithful cast in plaster of Paris of the Venus de Medici, or of the Apollo Belvedere, cannot for a moment produce the impression that the original does. That peculiar translucency of the surface of the finer kinds of marble, which invests all works carved in them with a characteristic charm, and completely cheats the eye of the beholder, is not possessed by any other material, and therefore, there is an initial disadvantage in comparing works done in sandstone with those made of marble. The superiority of marble, however, is due to nature and not to art; and in judging of artistic taste and capability, it would be but fair not to look to the material, but to the design and the manner in which sculptures are worked out; and if this canon be admitted, and the works of Uriyá artists be judged by their æsthetic design, their freedom and boldness of outline, and general execution, they will not suffer much by comparison with those of any other nation of their time or of antiquity.

"The Greek treatment of the acanthus and other vegetable forms may be," as noticed by Professor Lübke, "a model for all ages; and Roman art also has produced leaf work which is thoroughly perfect in style,"† but, due allowance being made for the difference of material, the differences between them and Uriyá art as manifested in the delineation of vegetable life, is not so overwhelmingly great as is apt to be supposed. Carefully judged many points will offer in which a comparison may be held without discredit to the latter.

According to the author just quoted "the representation of *vegetable life* is excluded from the sphere of sculpture." "Whenever consequently a vegetable creation is introduced into a work of" (Greek or Roman) "sculpture as an aid to the understanding of local and other relations, sculpture is obliged to give up all detailed delineation, and rather to produce a symbolic intimation than an imitation of actual reality."‡ The same, however, cannot be predicated of Orissan art. In it vegetable life forms just as much a subject of sculpture as any other object in nature, and, as a matter of fact, has been represented much more largely than animal, or human, life. This peculiarity may be due to the amount of artistic talent necessary for carving vegetable forms being small, or to the fact of such forms sorting best with the genius and taste of the people, but this is certain that the Uriyá artists depended very largely on the beauty of their vegetable forms for the success of their works, and introduced them as primary, and not accessory, ornaments in their architecture much more extensively than any other nation of antiquity. It is not to be denied that vegetable representations in stone must necessarily be to a certain extent wanting in "detailed delineation," and also to some, but not to the full, extent implied by the words, "rather symbolic intimations than imitations of reality." Circumstances render this unavoidable, and Uriyá works form no exception to the rule. There is, nevertheless, visible in the latter a considerable amount of success in faithfully representing nature. It should also be observed that "ornament has," as justly and very pointedly put by Ruskin, "two entirely distinct sources of agreeableness: one, that of the

* In the Rámáyana, Sítá is described to have been confined [illegible] it adoration. On [illegible] of the waxing moon in Chaitra a special feast is grove, and there subjected to great oppression and harshness to force her [illegible] em called Aśoka Saptami.
wishes of Rávana, but in vain; and Hindu women accordingly associate [illegible] † Lübke's History of Sculpture, i p. 3.
idea of constancy and chastity with the tree, eating its blossoms and offe[illegible] ‡ Loc. cit.

abstract beauty of its forms; * * * the other, the sense of human labour and care spent upon it. How great this latter influence we may perhaps judge, by considering that there is not a cluster of weeds growing in any cranny of ruin which has not a beauty in all respects *nearly* equal, and, in some, immeasurably superior, to that of the most elaborate sculpture of its stones: and that all our interest in the carved work, our sense of its richness, though it is tenfold less rich than the knots of grass beside it; of its delicacy, though it is a thousandfold less delicate; of its admirableness, though a millionfold less admirable; results from our consciousness of its being the works of poor, clumsy, toilsome man. Its true delightfulness depends on our discovering in it the record of thoughts, and intents, and trials, and heartbreakings—of recoveries and joyfulness of success: all this can be traced by a practised eye; but, granting it even obscure, it is presumed or understood; and in that is the worth of the thing, just as much as of anything else we call precious."* This extraneous or adventitious value in Orissan floral ornament deserves especial mention. Combined with a considerable amount of faithful representation and integrity there is an amount of luxuriance of decoration, of picturesque arrangement, and of sumptuous display of successful human labour governed by thorough intellectuality that claims a high meed of praise.

Animal life.

In the representation of vegetable life in sculpture the artist has only form and motion to study, but no life, such life and freshness as are visible in vegetation after a summer shower, or the depression noticeable under a parching hot sun, belonging to the province of the painter, and not being attainable by the sculptor's art. The task of the artist, therefore, is easier when he carves foliage, flowers and trees than when he undertakes to reproduce the brute creation in stone. Then he has, besides form and motion, some ethereal, intangible, but at the same time most important elements, viz., sensuous passions, to portray, and his undertaking becomes proportionately more arduous. But the Uriyás did not prove unequal to the task. They made considerable progress in it, and displayed much tact and ingenuity. Reference has already been made to their life-like pictures of monkeys, and the success with which sensuous passions have been shown in them, (*ante* p. 47). The elephant has also been carved and chiseled with great skill. The horse at the southern gate of the Konárak porch is remarkably well proportioned, and representations of rats, parrots, geese, goslings, deer, and other animals shown in the illustrations annexed to this work will, I imagine, be generally acknowledged to be pretty close imitations of nature. A colossal bull in the enclosure of the Great Tower is also worthy of note as a specimen of well-finished animal carving.

The lion among animals is, however, invariably ill-carved. It has everywhere a conventional, unnatural half-dog half-wolf look about it that is as unlike a real lion as it well can be. Its claws, mane and position, either erect or rampant, are also altogether unnatural. It is generally represented as trampling on an elephant about one half to one sixth of its size, crouching under its forelegs. Looking at groups like these, and the marked disparity in the size of the two animals, I am disposed to think that the lion had become extinct in Orissa when the sculptures were made, and the artists had to depend upon tradition and their imagination to produce its likeness. This inference receives some support from the fact of the lions in the Udayagiri bas-reliefs being much better shaped, and they, it is to be presumed, were delineated when the animal was common in the country. In central and western India lions are still met with;† but in Bengal they have long since become extinct, and the tradition is that, with the exception of a single animal sacred to Bhagavatí now living in the wilderness near Kámákhyá, in Assam, there is no lion in existence in India. The Egyptians, as also the Assyrians, were superior to the Uriyás in this respect: their lions were not unoften carefully carved, displaying the muscles of their limbs to great advantage, and showing that when uncontrolled by religion the artists could imitate nature as successfully as their contemporaries. Some of their winged lions, however, are quite as bad as those of the Uriyás. Winged bulls and lions are unknown in Orissa.

Human figures.

Ascending from vegetable and animal to human life, we come to where the sculptor's art attains its highest perfection. It is then that it attempts "the representation of the divine, and the heroic," and the infusion into it of "the spark of divine life, the conscious soul," and "a reflex of immortal beauty, idealizing lifeless handicraft." Then it is that it becomes "an animated spirit-breathing art," which, according to Socrates [illegible] dialogue with the sculptor Clito,—"must represent the emotions of the soul by form." These predicates are, how[illegible] true only when applied to Grecian art in its perfection, and also to Roman art as a reflexion of Grecian genius. No [illegible]er ancient art made any near appr[illegible]h to that perfection. The Hindus were as far behind it as the Egyptians, Assyrians and Persians. The gulf between them and the Grecia[illegible]rtists of the golden age is wide and deep. The unique and inimitable perfection of the Phidi[illegible] the Praxitelian [illegible]herto been the great object of envy to artists of every age and clime, and it wou[illegible] idle to [illegible]ks of the Uriyá sculptors with the grand and

* The Seven Lamps of Architecture, p. 48.

† In the Proceedings of the Asiatic Society of Bengal for 1868, p. 198, [illegible] King adduces several instances of the true lion, not the maneless animal of [illegible]rat, having been recently shot by sportsmen in [illegible]náh in Central India.

the beautiful of the sacred land of art, as to compare the paintings of India with the *chef d'œuvre* of Raphael. The schools which preceded them were, however, neither so perfect, nor so far above the ordinary run of art in other ancient seats of civilization as to remove them from the sphere of comparison. The Etruscan, the Egyptian, and the Assyrian schools, have peculiarities which may be compared to advantage with those of Orissan sculpture to settle their relative merits. Doubtless they flourished long before the Orissan school, and a comparison between them cannot be fair to the ancient nations concerned; but as the object here is not to award the palm of superiority to any one nation, but to ascertain the position which should be assigned to the Uriyá artists in the history of art, it will, I think, not be held objectionable.

The necessity for the comparison also arises from the circumstance of there existing a very erroneous impression on the subject in Europe, owing doubtless to a want of adequate information. Authors, who devote chapter after chapter, and not unoften entire works, to Egyptian and Assyrian art, refer perfunctorily, only as a matter of form, to Indian art, and simply to declare that it is unworthy of notice, or fit only to be condemned. The spirit in which the subject is generally taken up will be best illustrated by the following quotation from Mr. Westmacott's "Handbook of Sculpture." After treating of the nature and character of Assyrian art, he says: "There is no temptation to dwell at length upon the sculpture of Hindustan. It affords no assistance in tracing the history of art, and its debased quality deprives it of all interest as a phase of fine art, the point of view from which it would here be considered. It must be admitted, however, that the works existing have sufficient character to stamp their nationality; and although they possess no properties that can make them valuable as useful examples for the student, they offer very curious subjects of enquiry to the scholar and archæologist. The sculptures found in various parts of India, at Ellora, Elephanta, and other places, are of a strictly symbolical or mythological character. They usually consist of monstrous combinations of human and brute forms, repulsive from their ugliness and outrageous defiance of rule and even possibility."* Dr. Wilhelm Lübke, in each of his two magnificent works, "the History of Art," and "the History of Sculpture," has devoted a few pages to India, but, like the author above noticed, only to come to the conclusion that the national religion of the people of this country could not favor the plastic art, and so they have none worthy of the name. After descanting on the effect of Hinduism and Buddhism on the mind of man, he says:

"In such a tendency of mind, the works of sculpture have suffered most. No religion ever brought to light such bombast of confused and mystical ideas as that of the Bráhmin. The character of the people inclines more than that of any other race to effeminate self-absorption and brooding speculation. Thoughtfulness degenerates at once into distorted ideas. The dreams of their wild imagination produced a mythology, the forms of which seem to ridicule all plastic representation. The divine beings are opposed to ordinary men by the unnatural number of their heads, arms, and legs. Thus the god Rávana is represented with ten heads and twenty arms; Brahmá and Vishnu with four; Siva with four or five heads—the latter sometimes, indeed, with one head, but in that case it is furnished with three eyes. Occasionally Vishnu appears with a bear's or lion's head, and Ganes'a even with that of an elephant; and, lastly, there are three-headed figures, denoting nothing less than the Indian Trinity (Trimurti), Brahmá, Siva, and Vishnu.

"The form, therefore, that would appear to us as a monster is by them regarded as a god. How low is the stage of consciousness which can recognize the divine only in that which is unnatural, distorted, and monstrous! And how should sculpture ever rise to higher forms when hand in hand with such a religion! Langlès, in his Monuments of Indian Art, gives the copy of a drawing by a Bráhmin, from the Imperial Library at Paris, which exhibits better than many words the unplastic spirit of these religious ideas. The subject is the birth of Brahmá. Vishnu is represented as a woman, lying feebly on a lotus leaf. All round are to be seen small fishes, and among them a floating man. This is the expiator, Márkandeya, who swims about in the Milky Way to save the world from destruction. Vishnu is naked, and is adorned with foolish ornaments; after the fashion of a child, he holds his left foot with its large toe in his mouth. The many-headed, many-armed, and many-legged Brahmá is fastened to his umbilical cord. This one instance of the theological ideas of Brahminical dogmatism will suffice.

"It is almost exclusively subjects of mythology which engage Indian sculpture. A simple representation of actual life seems almost entirely lacking. Why should art be inspired to delineate the circumstances of daily existence, when, according to the teaching of the Brahmins, the world was only to be regarded as a dream of Brahmá's, or the product of Máyá (delusion), and when, moreover, by the assumption of an endless transmigration of souls, the value of each individual creature became illusory? Equally little can we look for the vigorous life of historical art on such a soil of mystical and speculative confusion. It is only exceptionally that we meet with works, created as they are in a clearer and purer atmosphere. Yet we must not forbear here to point expressly to the [illegible] and unreliable character of our sources of information. Much as has been said of the splendour and fabulous magnificence [illegible], the value of most of these reports is but small in a

* Westmacott's Handbook of Sculpture, p. 50.

critical point of view. We lack, moreover, satisfactory drawings, which might compensate for the deficiency of information. For this reason, therefore, any accurate appreciation or historical representation of Indian sculpture has been hitherto impossible. We must, in consequence, limit ourselves entirely to certain general remarks.

"We find the great mass of Indian sculpture as reliefs on the façades of their rock temples, or on the outside of the pagodas. These productions of an extravagantly luxuriant architecture are often completely covered with sculptures. Equally frequently are they introduced also in the interior, in niches and on capitals and cornices. The Brahminical temples surpass in richness and fantastic wildness the Buddhist shrines, although at a later period Buddhism also could not resist the more splendid decoration of its monuments. The insulated statue, the highest and truest production of sculpture, is lacking to Indian art. Even the frequently colossal images of the seated Buddha, in the principal niche of Buddhist caves, are not statues but haut-reliefs. Deficient in freedom as she appears intellectually, Indian plastic art shows herself thus also outwardly; she is the slave of architecture, to which she must be subservient in all its caprices; mistress and slave, alike devoid of all pure artistic intention, combined in mystical confusion wild, fantastic, and monstrous."*

Again, after commenting on what he describes as the "ancient, fantastic, polytheistic belief of Bráhmanism, which by its spiritless formula, its mechanical hypocrisy, and depressing creed of an everlasting migration of souls, had corrupted to the utmost the national mind of the Hindu people," Professor Lübke observes: "The feeling of the people, however, did not create these sacred images from distinct conceptions, nor from pure human notions, but from dreamy fantastic ideas, and from mystical speculations. Art is here not merely the handmaid of religion, but the handmaid of a worship which finds approach to the idea of God in symbols of a monstrous kind. Wherever, therefore, the forms of the gods, or the history of their wonderful destiny, were to be portrayed, wherever deep and mysterious awe of the unapproachable was to be manifested, the accessories were only outwardly symbolic, and the vague attempt at effect is produced by heaps of wings, hands, arms and legs, or quaint combinations of animal and human bodies."†

The lack of information to which reference has been made in the above extracts will account for the many serious errors and misstatements, such as the absence of insulated statues and of simple representations of actual life, the relative dreaminess of Buddhism and Hinduism, &c., which disfigure them; and it is unnecessary to refute them in detail. But the general principle on which their main argument is based, is so obviously and so entirely fallacious, that I cannot help expressing my wonder that a professor, historian, and art-critic of Dr. Lübke's standing and reputation should have so readily adopted it.

It is undeniable that religion exercised a most potent influence in the development of the plastic art in the early states of human society; and it is not surprising, therefore, that there should be observable prominent marks of a close alliance having existed between it and sculpture in former times. Then religion and sculpture often went forth hand in hand, and the light of the one frequently fell on the other. The same may be said of the fine arts generally, for poetry, music and architecture, were as intimately connected with religion as sculpture. But they are nevertheless by their origin and nature as distinct and separate as the different intellectual faculties of man can well be, and in their progress each of them has followed its course without being very materially controlled by its allies. At any rate certain it is that plastic art attained its highest development, and called forth the greatest efforts of artistic genius, while living in close alliance with crass idolatry; and Christian Europe has hitherto failed to restore the lost hand of the "Laocoon" of idolatrous Rome. A far purer religion now prevails in Europe than was ever before known in Greece or Rome, and the conception of the nature of the Deity there among the different orders of the people, is certainly better than that of the Grecians, class for class. But plastic art, instead of gaining by alliance with a higher state of intellectuality and a purer and holier religion, has positively degenerated, and fallen back. It is futile therefore to take for granted that the grossness of the Hindu religion and its metaphysical dreaminess are the only causes or the chief causes, of the low character of the Indian plastic art, or rather to assume, as the professor has done, that Indian plastic art must be low, because the Hindu religion is bad.

It is not for me to plead in favor of Indian mythology, nor am I its apologist; but very few intelligent persons will venture to maintain that Greek mythology was much superior to it. There exists a family likeness between the two which has induced several to attribute to them a common origin. If so, the professor's major premise might, it would follow that the influence of religion on the fine arts should be alike in India and Greece. Moreover, plastic and pictorial representation of mythological allegories must give rise to forms which are unnatural, and monstrous, and nations which look upon such mythology as sacred, do not hesitate to recognize the forms. It remains, however, to be shown that this

* History of Sculpture I., p. 12. † History of Art I., p. 84.

recognition of divinity in forms which to Europeans of the present day appear monstrous, necessarily destroys, or over-powers, the æsthetic faculty, and that those who do so, are, as a matter of course, incapable of appreciating the beautiful. No nation of ancient or modern times has evinced a higher sense of the beautiful in art than the Grecians. The beau ideal of perfection in the human figure was conceived and developed by them, and them only, and yet the same Grecians recognized in Triton, the "upper part of whose body was human, and the lower part like that of a fish, with a tail turned in a lunar form," a god, and the son of their great god Neptune. They had also a god, Pan, "who had the body of a man, a red face with a flat nose, horns upon his head, and the legs, thighs, tail, and feet of a goat." Another of their gods, Typhóeus, son of Earth by Tartaros, was hundred-headed, and three sons of their great god Uranos, namely, Cottos, Briareós, and Gyés, had each a hundred hands (ἑκατόγχειρες). These were certainly more monstrous than the elaphocephalous Gaṇes'a, the four-headed Brahmá, and the ten-handed Durgá of the Indian mythology. As to the four hands of Vishṇu, it would not be amiss to observe that æsthetically two pairs of hands for a single human figure are not more unnatural than a pair of hands and a pair of wings on the same figure, such as the Greeks and the Romans clapped on even their handsomest Cupids. Vishṇu with a lion's head has his counterpart in O'ceanos who, according to Euripidés, was "bull-headed" (ταυρόκρανος). Then for Rávaṇa, whom Professor Lübke takes to be a god, but who is an avowed monster, and other Indian abnormal representations, the Grecians had their Sirens who, whatever their original forms, were by their artists "furnished with the feathers, feet, wings and tails of birds," and are so described by Apollónios (IV. 898);—their Gorgons, whom Æschylus calls "the three sisters of the Grææ, winged, serpent-fleeced, hateful to man, whom no one can look on and retain his breath; *i. e.* live."—(Prom. 800 et seq.);—their Grææ, "the three long-lived maids, swan-formed, having one tooth and one eye in common, on whom neither the sun with his beams nor the night moon ever looks;" (Op. cit.);—their Harpies, "odious, offensive monsters with female faces, and the bodies, wings, and claws of birds;—their Satyrs and Tatyrs and Centaurs: these are beings which certainly inspire no very lofty sense of the ideal of beauty in the issues of Grecian gods and supernatural beings; but they at the same time afford unmistakable evidences "of attempts to produce effect by the quaint combinations of animal and human bodies," which, in connexion with the Hindus, Professor Lübke so emphatically condemns.

Nor were these beings merely the *dramatis personæ* of myths and legends; most of them formed the subjects of plastic art among the Greeks, and their greatest artists not only prepared them, but prized them most highly. It is said that Phryne, the Theban courtesan, after whom Praxiteles had chiseled two of his inimitable Venuses, wishing to possess the finest piece of work in the atelier of the great master, "sent one day a servant to Praxiteles to tell him that his workshop was in flames, and that his works were in danger of being destroyed. Praxiteles rushed out in the greatest alarm and anxiety, exclaiming that 'all was lost if his Satyr and Cupid were not saved.'"* The exclamation gave the shrewd woman an idea of what was the most valuable in the estimation of Praxiteles, and she took the Satyr for choice. This shows that it was possible for the artist who conceived and perfected the renowned Cnidian Venus and the handsomest Cupid, likewise to conceive and develope a Satyr, and, what is more, to hold the Satyr and the Cupid in equal estimation. It is evident also that the nation which believed in a gross polytheistical religion, and accepted Triton and Pan for divinities, could appreciate, and, by its appreciation, lead to the production of the finest works of art that human ingenuity has ever brought forth. The Romans, likewise, following an equally gross polytheistical religion, and believing in the divinity of the two-headed Janus,† did produce works which continue to this day the models of perfection.

Looking to these facts, the only conclusion that can be arrived at is, that however great the influence of religion on the plastic art, and great it certainly was at one time, it never was sufficient to destroy her separate existence, or even to control to any material extent her independent progress. When in alliance with religion, she [illegible]ved religion faithfully, by producing forms which it demande[illegible] without any reference to taste, but she never lost her yearnin[illegible]lvance to perf[illegible]tion, and that irrespective, and even [illegible] of the checks, which religion tried to impose on her. The yearning was strong [illegible]ugh even in the very early ti[illegible] of the ancient Egyptians, who had to lay down rules to prevent the statues of gods from [illegible] carved in other than the [illegible] conventional self-same way which their forefathers had approved during the infancy [illegible] The Hindus did the same [illegible]nd yet the E[illegible]ns and the Hindus failed to prevent the delineation of simple objects of nat[illegible]nd scenes of every-d[illegible] as to ma[illegible] the attempt at imitation more and more faithful, and quite different [illegible] what the [illegible]isted upon. In [illegible]e same way, when serving as a handmaid to poetry, plastic

* Westmacott's Handbook of Sculpture, p. 180.

† Janus Bifrons or Biceps. This divinity seems not to have been [illegible] with f[illegible] and at Rome there was a temple of Janus Quadrifrons. [illegible]ritable twin-brother of the Hindu Brahmá. See Keightley's satisfied with his two heads, for "it is said that at the taking of Falerii a st[illegible] Greece and Italy, p. 463.

art, without forgetting her own true end, tried her best to give shape and form to poetical ideas and allegories, and did so without reference to the extent to which she conformed to natural laws. Phidias, carving his celebrated figure of Minerva, thirty-nine feet high, had to put on her hand a winged figure of victory, and this could be done by making a full grown and fully-dressed woman stand on the open palm of another, but the unnatural arrangement never deterred him from accomplishing the task he had undertaken. In later times, Michael Angelo was called upon, by the nature of his subject, to introduce a monster's head with the horns of a ram, at the bottom of his unrivalled work of art, the Last Judgment. In the creation of Eve in Wells Cathedral, there is a composition in which a human figure is shown leaning on a bench, and from his back projects the upper half of a female figure, *i. e.*, a monster with two heads, and two trunks supported on one pair of legs. The object of the artist, it is true, was only to represent a particular instant in the production of a natural being, but the resulting figure is abnormal for all that. Giovanni dá Bologna had to reduce to shape the allegory of Mercury or rumour depending on human tongue, and he designed a lithe, agile, nude male figure with a cap and wings on his head, leaping out of "expanding rays (but very material and like a bundle of sticks) issuing from the puffed cheeks, or rather mouth, of a zephyr, whose head only is exhibited."* Again, Benvenuto Cellini, in his no less celebrated than magnificent group of Perseus and Andromeda, represents Perseus descending from mid-air to liberate the captive fair, and save her from the attack of a dragon issuing from flames, but, as travelling in mid-air, however natural to birds, is not quite consonant to human nature, the figure looks more like a man kicked down headlong from the top of a house than a hero descending for a fight with a monster. This offence against nature could not, however, be avoided. The story needed it, and the artist did what he could to preserve its substance. Similarly, when the Hindu artist had to give shape to the allegory of the birth of Brahmá, he designed, not a woman as supposed by Dr. Lübke, but an infant reclining on a leafy couch to typify the perfection of innocence and purity, and made it suck its toe, as an emblem of supreme happiness, and it is questionable if there is any other object in nature which can symbolise those attributes to greater perfection than an infant so occupied. The ornaments on the infant may be "foolish" according to European notions regarding such things, but there exist such excessive differences of opinion and so much local prejudice even among Europeans regarding the propriety and beauty of particular personal ornaments, that a very good plea, I fancy, may be urged in their favour, founded on the spirit of the age when the sculpture was first designed, and on the attachment of the people of this country to ornaments. The issue of an umbilical cord from the navel of such an infant, and the presence of a human figure,† Brahmá, on the top of it, however unpoetical, are, on the whole, not quite so revolting as the Eve of Wells Cathedral.

Besides mythology and poetical allegory there are other causes which lead to monstrous, unnatural, or incongruous representations in paintings and sculpture: these are caprice, artistic conceit, and extravagance, very similar to what are so common among poets. They lead to the production of rams issuing from the volutes of Corinthian or composite pillars; of human figures whose nether halves are formed of undulating dock weeds,—compositions which first made their appearance on the frieze of Torre de Nerone, and long after got into fashion among the artists of the Renaissance;—of lions and bulls whose hind quarters are formed of the same weed; and of a variety of other unnatural forms, some very pleasing, others grotesque and repulsive. But such vagaries, whether resulting from mythological, allegorical, poetical, or artistic causes, are mere accidents, and not the essentials of the plastic art, and their presence therefore does not afford sufficient *à priori* argument against the possibility of the Hindus attaining any great proficiency in sculpture. That they did not attain it is a fact not to be denied; but the cause is to be looked for elsewhere than in their religion. What the cause was which led to this negative result I shall not venture to guess, seeing that European scholars have not yet been able satisfactorily to account for the positive superiority of the Greeks.‡

Dædalian school.

The different ancient schools with which Orissan art may be compared are the Dædalian, the Æginetan, the Etruscan, the Egyptian, and the Assyrian. They all show manifest marks of an early state of art—of an art which had risen [illegible] the [illegible]ude imitation of primitive races—of [illegible]re ingenious [illegible]g,—and fully assumed its position as an art, but was still [illegible]ting the [illegible]nius of a great master—of a [illegible]—who could emancipate it from its archaic and hieratic fetters, and may, therefore, be fair[illegible]ut in juxta-position with the [illegible], notwithstanding the fact of there being great differences in the[illegible] The general [illegible]racter of the school of Dæd[illegible] exemplified in "the self-same face, figure and action of Jupiter, Nept[illegible] Here[illegible]al heroic characters [illegible]eir "[illegible]w eyes, their thin lips with the corners of the mouth turned upwards, their pointed chin, n[illegible] loins, and [illegible] muscles,"§ [illegible]peak a primitive age of art.

* Westmacott's Handbook of Sculpture, p. [illegible] [illegible]macott's Handbook of Sculpture, p. 76.

† The multiplicity of hands and feet assigned by Dr. L[illegible] Westropp's Handbook of Archæology, p. 126. is not authorised by the allegory, and is probably due to a mistak[illegible]

The works of the Æginetan age (B. C. 580-480) are somewhat in advance of the last; but "the heads are still either totally destitute of expression, or are all reduced to a general and conventional expression," and by "the oblique position of the eyes and mouth, they present that forced smile which seems to have been the characteristic feature common to all productions of the ancient style."* Adverting to this era Mr. Westmacott, in his remarks on the celebrated collection of statues discovered in 1812 in the island of Ægina, observes: "Here again the archaic element steps in in the character of the head, which exhibits all the peculiarities of the more ancient schools before referred to. However earnestly engaged, and even when wounded or dying, each warrior or hero has a smiling expression; the mouth being slightly open, as though the occupation of slaying and being slain was of the most pleasing and satisfactory nature."†

Æginetan school.

Professor Lübke's estimate of the merits of this school is very much the same. Talking of Greek art of the end of the 6th century, he says: "We find animals fighting, then a lion tearing a roe to pieces; then sphinxes and centaurs, human figures with fishes' bodies and other phantastic devices, side by side with scenes from actual life, such as men reclining at a social feast; and all in a heavy stiff style, the figures strongly out of proportion and varying in size."‡

The first style of the Etruscan art was far inferior to that of Dædalus. "The rectilinear lines, the rigid attitude, the imperfect moulding of the features, the want of proportion in the limbs, and the oblique eyes which characterise it, and which received from the Romans the contemptuous name of 'opera Tuscanica,'" and the exaggerated forms of its second style, the very opposite of all that is graceful, easy, and flowing, place them in a low stage. The superiority of the later Etruscan, as of the Roman, style is due to the influence of the Greek art of the golden age, and need not therefore be noticed in detail.

Etruscan school.

Egyptian art is by far the oldest; but by no means the most perfect. "Egyptian bas-relief," says Sir Gardner Wilkinson, "appears to have been, in its origin, a mere copy of painting, its predecessor. The first attempt to represent the figures of gods, sacred emblems, and other subjects, consisted in painting simple outlines of them on a flat surface, the details being afterwards put in with colour; but in process of time these forms were traced on stone with a tool, and the intermediate space between the various figures being afterwards cut away, the once level surface assumed the appearance of a bas-relief. It was, in fact, a pictorial representation on stone, which is evidently the character of all the bas-reliefs on Egyptian monuments; and which readily accounts for the imperfect arrangement of their figures.

Egyptian school.

"Deficient in conception, and above all, in a proper knowledge of grouping, they were unable to form those combinations which give true expression; every picture was made up of isolated parts put together according to some general notions, but without harmony or preconceived effect. The human face, the whole body, and everything they introduced, were composed in the same manner, of separate members placed together one by one according to their relative situations: the eye, the nose, and other features, composed a face; but the expression of feelings and passions was entirely wanting; and the countenance of the king, whether charging an enemy's phalanx in the heat of battle, or peaceably offering incense in a sombre temple, presented the same outline, and the same inanimate look. The peculiarity of the front view of an eye, introduced in a profile, is thus accounted for; it was the ordinary representation of that feature added to a profile, and no allowance was made for any change in the position of the head."

"It was the same with drapery: the figure was first drawn, and the drapery then added, not as a part of the whole, but as an accessory; they had no general conception, no previous idea of the effect required to distinguish the warrior or the priest, beyond the impressions received from costume, or from the subject of which he formed a part; and the same figure was dressed according to the character it was intended to perform. Every portion of a picture was conceived by itself, and inserted as it was wanted to complete the scene; and when the walls of the building, where a subject was to be drawn, had been accurately ruled with squares, the figures were introduced [illegible] this mechanical arrangement. The members were appended to the body, and these squares regulated their [illegible] distribution, in whatever posture they might be placed.

"Thus then, as Diod[illegible] eyes of Egyptian statues, [illegible] figure might be made by several artists in different places, th[illegible] attitude having been [illegible] which, when brought together, would necessarily agree and fo[illegible]

* Westm[illegible] Handbo[illegible] of Sculpture, I, p. 82.

† Handbook [illegible] Wilkinson's Ancient Egyptians, III., p. 264.

This uniformity, rigidity, and absence of nature and life which characterise the bas-reliefs, may likewise be noticed in the statues of Egypt. Page after page may be turned of the whole series of the ponderous tomes* of the savans who accompanied Napoleon the Great in his Egyptian expedition, without encountering a single human figure which has any life, expression, or action—any dignity, grace, or ease—about it; or is other than a stiff, formal, rude imitation of nature. The cause of this may be partly due to the law referred to by Plato which forbade the artists to depart, in the slightest degree, in the execution of statues of the human form from the type consecrated by priestly authority, but it implies likewise a primitive state of art, and want of appreciation of, or inability to develope, the beauty of nature in stone. True it is, as justly remarked by Plato, "that the pictures and statues made ten thousand years ago are in no one particular better or worse than what they now make."† The statues may be colossal in size, and vast in number, and, for the time when they were sculptured, highly creditable to the nation which made them; but they are neither natural nor beautiful.

Assyrian school.

The sculptures of Assyria are superior to those of Egypt. They display much more life, energy and action. According to M. Beulé, "Ce don de saisir l'énergie de l'action et de caractériser la force physique est le principal mérite de la sculpture ninivite; elle constitue son originalité. Je ne sais trop si la race assyrienne fournissait le modèle de ces corps si bien charpentés, aux formes athlétiques, aux muscles tendus comme des cordages; je crois plutôt que les artistes avaient exagéré la nature et créé cette convention. De même que les artistes égyptiens effacent les saillies sur la peau, font la tête, les membres, les extrémités grêles, et obtiennent un type idéal et presque immatériel; de même les artistes assyriens se plaisent à faire les corps trapus, les épaules larges, la tête forte, le cou puissant, les bras et les jambes conturés par la tension des veines et des muscles."‡ They are, however, as deficient in the true spirit of art as the sculptures of Egypt. The author quoted above thus sums up the defects of Assyrian art: "Ce qui prouve que, dans l'un et l'autre pays, on était arrivé à une convention absolue, c'est que les manœuvres, les prisonniers, les ennemis qui habitent sur les frontières les plus reculées, sont figurés avec la même forme, qui n'était plus qu'une sorte d'écriture signifiant l' *homme*; de même que toutes les têtes ont la même coiffure, la même barbe bouclée, le même nez, le même œil. Le costume et la richesse des ornements servent seuls à distinguer le roi du dernier de ses soldats. Quant aux eunuques, ils ont le maintien lisse et la chevelure des femmes avec des membres et des muscles virils."§

Orissan school.

In all these there are peculiarities which may be more or less predicated of Orissan art; but at the same time there are points of excellence in it which are not to be met with in the ancient schools named. The conventionality of form, which is so marked in them, prevails to some extent everywhere in India. It resulted from indolence, combined with a desire to imitate art instead of nature, under circumstances which were particularly favourable to such mannerism. Untouched by extraneous influences, art in Orissa successively rose, became stationary, and declined with the civilization of the people, very much in the same way which marked its course in Egypt and elsewhere; and its characteristics must to a certain extent be alike. The manner in which this conventionality takes the place of nature, has been most forcibly pointed out by Mr. Layard in his remarks on the decline of Assyrian art. "A certain proficiency," he says, "had been attained, and no violent changes took place to shake the established order of things, the artist, instead of endeavouring to imitate that which he saw in nature, received as correct delineations the works of his predecessors, and made them his types and his models. In some countries, as in Egypt, religion may have contributed to this result. Whilst the imagination, as well as the hand, was fettered by prejudices, and even by law, or whilst indolence or ignorance led to the mere servile copying of what had been done before, it may easily be conceived how rapidly a deviation from correctness of form would take place. As each transmitted the errors of those who preceded him, and added to them himself, it is not wonderful, if, ere long, the whole became one great error. It is to be feared that this prescriptive love of imitation has exercised no less influence on modern art, than it did upon the arts of the ancients."‖

Its general character.

The art of the Uriyás had its founda[illegible] on the canons of the S'ilpa S'ástra, which itself deduced them whe[illegible] Indian art had a[illegible] pitch of excellence, for it conforms to them in all [illegible] features; and thu[illegible] ook instead of nature for i[illegible]del, it ha[illegible] phill work to exceed the limit of excellence whi[illegible] The S'ilpa S'ástra, howeve[illegible] welt on [illegible] forms, proportions, and features of gods, but it said nothing [illegible] igures, and the artists had [illegible] y some liberty in dealing with the latter; but as gods are only the i[illegible] type[illegible] vantage was not co[illegible] rtheless conventional forms are more frequent in the representations of gods than in those of mort[illegible] f gods and goddesses in

* The writer regrets the necessity of depending [illegible] elsewhere [illegible] Savan[illegible] let 1870. [illegible] secondary evidence in the absence of personal knowledge of the o[illegible] evidence in the present instance, however, is generally acknowledged to [illegible]

Orissa, though carved in finer stones and finished with greater care and labour, are less successful as works of art than figures of ordinary men. This is best shown in Illustrations Nos. 63 and 64. The first is taken from a colossal figure of Bhagavatí, "the mother of the universe," elaborately carved in black chlorite, and placed in one of the principal niches of the Great Tower of Bhuvanes'vara; and the second, a mere ornamental figure of a dancing girl, in a side niche of the Rájaráni Temple; and yet the mortal is far handsomer and more faithful to nature than the goddess. Illustrations Nos. 58, 59, and 60, also represent human figures, executed without much reliance on the rules of the S'ilpa S'ástra, which may be taken to be average examples of the condition which the art of sculpturing such subjects had attained in Orissa. Generally speaking the forms of Orissan human figures are light and natural, and their action easy and lively. There is also manifest in them a knowledge of anatomy, a study of the organic contexture of the body, of the contour of its different members, a sense of the laws of gravity and motion operating on the body under different circumstances, and an excellence of imitation, carried to such a degree of truth as to give convincing proofs of an advanced step, and a higher stage in the development of art than are to be met with in Egypt or Assyria. The outlines, instead of being hard, stiff, and rectilinear, as in Egyptian, Assyrian, Etruscan, and Dædalean sculptures, are everywhere rounded, soft, graceful, and in admirable repose. There is scarcely a single sharp angle, or a rigid straight line, in the whole composition to disturb its beauty; and the execution throughout, though deficient to a certain extent in chiseling and finish, is such as to give the palm of superiority to Orissa. Even in small bas-reliefs, the easy grace of the king or the queen, the respectful attitude of the attendants, the versatility of the story-teller, and the gravity of the musician, are represented with considerable success. The bas-reliefs of Udayagiri, though coarser and very much decayed, are even more full of life, action, and energy, and display a considerable amount of artistic conception. The bas-reliefs of Sánchi and Amarávati are inferior to the last in this respect, but they are nevertheless superior to those of Egypt and Assyria. In some examples the poetical hyperboles of exceedingly slender waist and large hips, are attempted to be represented in stone at a sad sacrifice of truth; but they are by no means the most finished samples of Uriyá art.* The breasts are generally more protuberant than in Europe, Egypt, and Assyria, and are to some extent offensive to European taste; but this is probably due to a faithful representation of Orissan life, and not to a defect of art, or to a vitiated taste of the people reflected on the artists. The female breasts are generally much more developed in India than in higher latitudes; and in Orissa and Bengal they are particularly so, leading to early pendulosity to an extent unknown even in the North-Western Provinces. In the Panjab their size is generally not so large, nor does the declination commence until after the fortieth year, whereas in Bengal and Orissa it commences almost at the close of the teens, and the artist here, who would follow life, could not but produce something less beautiful than his brethren in Europe. This doubtless amounts to an admission that the artists failed to develop the ideal—to combine in one figure the finest points of beauty from a hundred living models—such as the Greeks did, and the Indian poet conceived in his Tilottamá; but the fact cannot be gainsaid.

Muscles.

A similar attempt to represent nature faithfully has resulted in another defect which European artists cannot but complain of:* Indian statues are sadly wanting in muscles. The appearance of firmness, vigour, and strength, which so prominently characterises Grecian male figures, is due, to a great extent, to the bulging, knotty and rigid muscles they represent. The deltoid, the biceps, the pectoral, the gastrocnemius, and other muscles are all chiseled to perfection, and they strike the beholder with a sense of great strength and heroic manliness. Assyrian figures are, also, as stated above, well executed in this respect; but in Orissa prominent muscles are but too frequently wanting. Even the statue of Kártikeya, the mighty God of War, in the Great Tower of Bhuvanes'vara, to the execution of whose ornaments and garlands and brocade dress the artist has devoted uncommon attention and labour, appears without a single muscle [illegible]jecting from under his skin. The calves, arms, breasts, shoulder[illegible], in short t[illegible] whole body, is rounded, soft and plump, like [illegible]. Kártikeya, however, is a youthful divinity, pa[illegible] [illegible]he Apollo than the Hercules of the Grecian

* Professor Lübke [illegible]mments on [illegible]ject: "The organic structure of the body, the articulation [illegible] and the network of muscles and sinews, disappear beneath the [illegible] voluptuousness. Every thing indicating vigorous strength and ener[illegible]tion of will, is utterly repressed; the figures are only quali[illegible] enjoyment, and for a vague dreaminess. They appe[illegible] as the flower quivering on its stalk or th[illegible] enough Sakuntalá's arm[illegible] indifferent [illegible] tory of Sculpture [illegible] to certain bas-relie[illegible]

[illegible], as admitted above. The cause assigned is, however, [illegible] is not the result of the [illegible] dreamy nature of the Hindu religion, but of [illegible]nting the human form as modified by the Indian [illegible] oleagenous and vegetable diet. The sneer at the supple arms of Sakuntalá, is due to the ignorance of the appearance of a banana stem, and therefore calls for no remark. It may, nevertheless, be a matter of enquiry to [illegible] Indians if the [illegible] of muscles and sinews" did, or did not, "dis[illegible] [illegible] of soft voluptuousness" on the arms of the Venus de

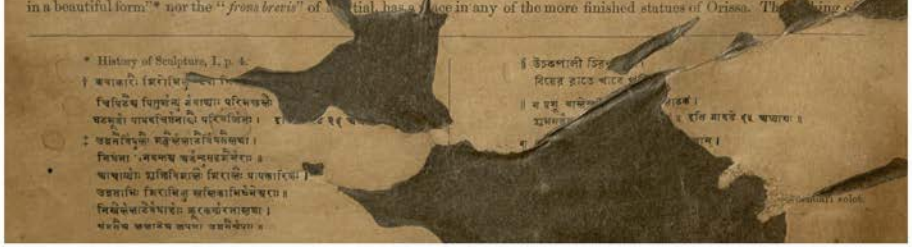
artists, and his plumpness, therefore, is in keeping with his myth. The nude male figures at Bhuvanes'vara, Puri, and Koṇárak are, likewise, all rounded, soft and plump, and in them is seen the portraiture of the Uriyá to perfection; for he, like the Bengali, never attains anything like a well-developed calf, or a swelling deltoid. Rigid, knotty muscles are rarely to be seen in ordinary people, and even in acrobats and professed wrestlers they are generally ill shown. A big stout man is always a fat man, never a muscular one; and in the vernaculars of the country, the two are indicated by the same term. It is not to be expected, therefore, that muscular forms should be represented in a prominent manner in sculpture. As justly observed by Dr. Lübke, "Art can only attain to her highest aim in such epochs and among such nations as universally recognise the beauty of the human form, in which it is promoted by natural capacity and favorable conditions of climate, in which it is developed by uniform exercise; and in which, lastly, the perfection of mind and body is equally cultivated."* In Bengal and Orissa, all these conditions are wanting; the climate is not only not favorable to exercise and development, but it induces a habit of indolent, sluggish, passive state of life, in which one would rather see a dance while seated at ease than dance himself; and that dance is more liked which consists of a series of gentle posture-making than that which is an exuberant display of energy as in Europe. The food of the people, also, is not only ill-calculated to develop the muscles, but it is exactly what is most favourable to cover the body with a supple coating of fat. In the North-Western Provinces, the people are taller, handsomer, and of better physique generally, but milk, ghi, and butter, being very largely used, and the climate for many months in the year being unfavourable to hard out-door exercise, their muscles are usually covered by a coating of fatty matter, and they fail to produce that idea of strength which prominent muscles are calculated to do. Egyptian sculptures are, also, sadly deficient in this respect, and it may be a question as to how far the defect there is due to ethnic peculiarities. It should be added, however, that in those Orissan figures which are represented as undergoing violent exertion, or bearing heavy weights, as in the dwarf under the architrave in Illustration No. 7, the circumstance is indicated as much by appropriate attitudes and positions as by rigid and swelling muscles displayed in a high state of tension. This cannot at all be predicated of Egyptian art.

Head.

The form of the head in Orissa is generally oval, and the features are natural. According to the *Garuḍa Puráṇa*, the top of the cranium of a well-formed head should be rounded like an umbrella, a flat one bespeaking poverty, and one like the bottom of a pitcher a worthless character;† and this rule is very closely followed by Indian artists. The crown is generally high, though owing to the top-knot and other ornaments on the head, it is impossible to measure exactly whether the height from the upper line of the forehead to the top of the crown would equal one-fourth of the face. The hair is soft and flowing, and always chiseled with great care. It is never curly or shaped into rounded buttons, as on the heads of Buddhist statues and Assyrian sculptures. Of the various ways in which the hair is dressed, detailed descriptions will appear under the head of coiffure.

Forehead.

According to the authority quoted above, men with low foreheads are always prone to cruel acts, and fit only to be exterminated. Very high protuberant foreheads are equally condemned;‡ in women especially so. A woman, who has a high protuberant forehead and serrated teeth, is sure, says an old adage, to lose her husband on the night of her wedding.§ Nevertheless the leaning is in favor of high foreheads. According to the *Garuḍa Puráṇa*, a forehead of medium size, somewhat protuberant, and shaped like a half moon, the upper arch being formed by the hair of the head, and the lower by the eyebrows, is the most appropriate.‖ The *Sámudrika* is not satisfied with this, and expresses it's liking for a good, broad, prominent forehead, condemning the narrow-headed to an early death.¶ In men of mature age a high broad forehead, is generally preferred, and this is what is common in sculpture, both for men and women; and in ordinary Uriyá life, this is not unoften heightened by the hair being combed backward, so as to expose the roots of the frontal hair, *i. e.*, in the "Alexandrine style," which Plutarch characterises by the words, ἀναστολὴ τῆς κόμης or "a pushing back of the hair." Neither the *tenui fronte* of Horace, which the old commentators explain to be "a narrow and small forehead which is usually commended in a beautiful form;"* nor the "*frons brevis*" of [illegible] has a place in any of the more finished statues of Orissa. The [illegible]



* History of Sculpture, I, p. 4.

† अथाकारे शिरोमि[illegible]
चिपिटैश्च पितृशस्त्रु [illegible] परिमण्डले
घटमूर्ध्वा पायसचिक्कादौ परिकल्पिते ।

‡ उद्वृत्तचिबुकः क्रूरेष्वाकारेषु विनिर्दिशेत् ।
निर्घृणः ·अवनश्च खड्गभङ्गेषु नरः ॥
आचार्यो ग्रन्थिशिराः शिराले पापकारिका ।
उद्वताभि शिराभिस्तु खल्लिकाभिर्धनेश्वरः ॥
निर्मांसेभाटेषाटेश्च क्रूरकर्मरताश्च ते ।
पश्चिमे भक्षनाशे च जायते नरके नरः ॥

§ उंडकपाली ভিক্ষু [illegible]
বিহের হাতে খাবে [illegible]

‖ य इमौ भ्रुवौ [illegible] ललाटकं ।
भ्रुमध्यगं [illegible] रवि मासयं रं भ्रुवाग्रः ॥

¶ [illegible] नम् ।

Bengali solet.

reflexed hair above the forehead, helps to improve the oval form of the face; and the advantage of it may be perceived by comparing it with heads, in which the hair is allowed to hang in front and cause the face to appear rounded.

Eyebrows.

Ordinarily no eyebrows are chiseled in the larger statues, but where they are shown, they are generally arched so as to represent a bow, and so drawn out as to appear from the front co-extensive with the ears. They are also joined at the root of the nose, a point of beauty which though praised by Theocritus, and attributed to Ulysses, Briseis, Augustus, Julia, daughter of Titus, and others, was never generally approved, and a Greek epigram takes it to be an indication of pride and bitterness of spirit. The Vishṇu Puráṇa condemns it sharply. The rule on the subject of eyebrows is thus laid down in the *Garuḍa Puráṇa:* eyebrows, "when high and thick, predicate a life of enjoyment; when uneven or shaped like the sacrificial sword *(Kháṇḍá)*, poverty; when long and unconnected with each other, affluence: good eyebrows are high and (arched) like the new moon."* And the *Sámudrika* copies it almost literally.

Eyes.

The shape and expression of the eyes constitute by far the most essential elements in the beauty of the human face, and much has been written by Sanskrit authors on the subject. According to the *Sámudrika*, "red eyes indicate affluence; feline eyes, anger; eyes like those of the cock, great capacity for work; like those of the deer, beauty; like those of cats and geese, vile character; like those of peacocks, mediocrity; like those of dogs, or of a tawny colour, a disposition to cruel acts; like those of oxen, uniform prosperity; and squint eyes, a wicked intriguing disposition."† Of these, for purposes of poetry, the "deer-eye" and the "ox-eye," the βοῶπις of Homer, are the most important; but that peculiar liquidity, bespeaking modesty and lovely grace, which make the eye of the gazelle so frequently the subject of comparison in Eastern poetry, is not attainable by the plastic art, and the ox-eye is equally beyond her province, unless the βοῦς of the compound term be taken as a prefix implying largeness.‡ In sculpture the eye is generally made large—often larger than living models would justify; and of the shape of the almond with the greater curvature lying on the upper side, and the lower eyelid forming almost a straight line. In maidens and young women, the upper lid hangs down and gives an amorous, languishing look. As the province of sculpture is not to indicate colour, no attempt has been made in large statues to indicate the iris or the pupils; but in bas-reliefs and metal figures, a circle is often drawn for the former and a dot for the latter, to indicate the light. The position of the eyes is longitudinal, never oblique as in Egypt and archaic Grecian statues.§ The interocular space is sometimes, but not always, less than the length of an eye, and the eyebrows are not in sufficient relief. Nowhere, however, is the gross error committed of giving a full eye to a profile face, an error so universal in Egypt. In bas-reliefs, the face assumes different positions from a perfect profile to a full face, and the shape of the eye is regulated according to the position of the face, showing in this respect a much superior knowledge of art, than what the Egyptian and Assyrian sculptors evinced.

Chin, lips and mouth.

The chin is never so pointed as in the Dædalian school of Greece, and the lips are never so thin and skinny. The opening of the mouth is small and in excellent keeping with the face. A forced smile in the female face is common; in one instance, that of a nude female in the Rájaráni temple, standing with the left hand across the breast, and the right in front of the body lower down, in the attitude of the Venus de Medici, the idea of modesty which the classic artist so beautifully pourtrayed, has been entirely dissipated by this unbecoming simper. The classic artist, also, left to the imagination to find out the cause of the position of his figure, whereas the less poetic Uriyá has introduced a grinning boy at the foot of the statue to explain its meaning, and thereby given to the whole a most indecent expression. The statue is perfectly insulated, and, but for its standing on both feet resting flat on the ground, could have been taken for a copy of the Medicean goddess. General Cunningham met with a somewhat similar statue at Mathurá; but its right hand does not extend sufficiently low, and it has some drapery and a great deal of ornament on its person. The General describes it thus: "The most remarkable piece of sculpture is that of a

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[illegible] ।
धुनी [illegible] ।
[illegible] गारुडे ६६ अध्यायः ।

† रक्ताक्षा धनवन्तश्च आघ्राक्षा [illegible]
कुक्कुटाक्षाः सदा दक्षा मृगाक्ष [illegible] ॥
बिडालहंसनेत्रा ये भवन्ति [illegible]
मयूराक्षा भवेयुर्ये [illegible]
[illegible]

The [illegible] translates it [illegible] have render[illegible]

[illegible] exceedi[illegible] well-shaped," "good-looking," "cow-faced," "cow-eyed," &c. [illegible] referen[illegible] the cow is accounted for on the supposition of Io being [illegible] moon, "ch[illegible] by Hera into a cow, the usual symbol of the horned [illegible]on. The ordina[illegible] large." The *Lalita-vistara*, how[illegible] gives a cl[illegible] [illegible]gnification. Among the thirty-two signs of great[illegible] [illegible]ked [illegible]on of Sákya it reckons "eyes deeply black like the [illegible]h and eye of a cow," (*Go-pakshma-netrábhinila-netra*), which has been translated by Mr. Foucaux from the Tibetan into "l'œil grand, blanc et noir." This is exactly equal to the term μελανόφθαλμος which Didymus, the scholiast [illegible]mer, gives as one of his alternative meanings. It is the blackness of the [illegible] which Homer praised, and not their size or roundness.

[illegible] should be noted, however, that a belief exists among the people of Bengal that the oblique eye is a peculiarity of the gods.

female of rather more than half life-size. The figure is naked, save a girdle of beads round the waist, the same as is seen in the Bhilsá sculptures and Ajanutá paintings. The attitude and the positions of the hands are similar to those of the famous statue of Venus of the Capitol. But in the Mathurá statue, the left hand is brought across the right breast, while the right hand holds up a small portion of drapery. The head is slightly inclined towards the right shoulder, and the hair is dressed in a new and peculiar manner, with long curls on each side of the face, which fall from a large circular ornament on the top of the head. The back of the figure is supported by a thick cluster of lotus stalks covered with buds and flowers, which are very gracefully arranged, and boldly executed. The plump face with its broad smile is the least satisfactory part of the work. Altogether this statue is one of the best specimens of Indian art that I have met with. I presume that it represents a dancing girl."* This smile, however, is not universal; and in the more finished specimens of work there is a great deal of expression and adaptation of the face appropriate to the subject intended to be expressed. In this respect the Uriyá artists, again, excel the sculptors of Egypt and Assyria, as well as those of ancient Greece. "The selfsame face and expression, alike in mourning or in jubilee, in every condition of life, so that a king differs not in the least from the peasant at the plough," so characteristic of Egyptian sculpture, is far from being prevalent in Orissa, though to a certain, and on the whole a very small, extent, it has not been prevented in minor figures. There is also in them more energy, more action, and altogether more life and feeling than are to be met with in the statues of Egypt.

Nose and ears.

In ancient Sanskrit poetry, the nose is usually compared with the flower of the sesamum, or the bill of the parrot, which would imply that the arched Roman nose, or a *nez aquilin*, was at the time reckoned the most beautiful; but in sculpture this is rarely met with. In the figures of gods and goddesses, the Hellenic nose running down in almost a straight line with the forehead, and forming a perfect Grecian profile, is the most common; but in human figures a slight depression at the root is ordinarily observable. In Egyptian figures the nose is always depressed. The ears are of the same size as the nose, and stand in a line with it.

Nationality.

The features are throughout Hindu of the Bengal type. There is nothing in any of the details, in the eyes, the nose, the cheek-bones, and the forehead,—those features where ethnic peculiarities are best indicated—to show a trace of aboriginal Tamilian characteristics; and this circumstance may be taken as a strong proof in favour of the Indo-Aryan origin of the works. Had the temples and their decorations proceeded from Dravidian artists, their character would have been entirely different. Even English painters of the present day, at least such as come to Calcutta, but too often give a European character to the native portraits they paint; and it is but natural to suppose that South Indian artists, had they been employed on the Orissan temples, would have given them a strong Tamilian cast.

Pose.

The most approved position for gods is standing on both legs, embodying the idea of firmness and dignity: for goddesses, the same, but resting on the left foot, the right leg crossing the left, and touching the ground by the ends of the toes. For Krishna this feminine position is the most approved, with three bends in the body, *(tribhanga,)* the first caused by the crossing of the legs, the second by a curvature at the waist, and the third by an inclination of the head to one side, generally the left. This is esteemed the most amatory and graceful, and dancing girls are often represented with these, or similar, bends. The Greeks took this position to be indicative of frolicsome youth and effeminacy, and assigned it only to Apollo, Bacchus and Mercury, censuring it, like the Hindus, in grave subjects.† For the different manifestations of Durgá this style of *tribhanga* is never tolerated, the myths on which they are founded requiring vigorous action. Such is also the case with some forms of the fierce god Rudra; and the figures of that divinity are often represented in positions and attitudes expressive of violent agitation. When, however, Síva appears in the company of his consort, the *lady* is placed on the lap of her husband, and the attitude adopted is one of easy grace and enjoyment. In the case of seated single figures of goddesses the usual position is that [illegible] squatting on a bench or chair, with one foot hanging down, or resting on a stool or a lotus. Ordinary women of quality appear squatting with the legs crossed. This is, however, far from being a general rule, and the pose is regulated by the nature of the subject, and by the place where they are located. Standing on one or both legs; leaning forward, or backward, or [illegible] dancing, running, leaping, sitting straight, or reclining on a pillow, are positions of common occurrence; but on the whole [illegible] manifestations of active energetic action are frequent, and those of an idle enjoyment of life predominate. "[illegible] find full swelling [illegible] ness of forms, and easy carelessness of attitude."‡ The nature of the Indian climate and its action on the [illegible] to which references have already been made is sufficient to account for this, without [illegible] religious to

* Archæological Survey of India, Report for 1862-63, I. p. 2[illegible]

† Winkelmann's History of Ancient Art, p. 160.

which European authors are so apt to refer everything Indian. The temper of nations, the outcome of the climate they live in, is a much more potent influence in such cases than religion, which itself is governed and moulded by it. It controls alike their aspirations in a future world as well as in this. The Valhalla of the Scandinavians, the Paradise of Muhammad, and the Indra's heaven of the Hindus, are all manifestations of climatic influences on the mind of man. And such influences are all-powerful on ordinary life and enjoyment. In northern climes, where active exertion is a *sine quâ non* of existence, wrestling, hunting, and fighting, games involving violent exertion, and scenes depicting warfare, are the most delightful. The highest effort of the poet is directed to war-songs, the noblest form of the dramatic art is tragic, and some of the finest specimens of the pictorial and plastic art exhibit the most stirring scenes of life. In India, on the other hand, the heat and enervating action of the climate for nine months in the year, render all exertion unpleasant, and life must, therefore, be more tranquil and seasoned with easy enjoyment. Music and singing and chess constitute the means of amusement; poetry sings of love; and the drama prohibits the exhibition of tragic scenes on the stage. It is but natural, therefore, that art here should take an easy, soft, voluptuous tone, very different from that which is most gratifying in high latitudes. In the early states of Indian society, when the Aryans had not yet lost their trans-Himalayan energy and vigour, the heroic in art and literature readily recommended itself to them, but in the seventh century of the Christian era, on the sea-board of Orissa, the case was otherwise.

Group.

There is also a propriety in the proportion of the different figures of a group in Orissa which we look for in vain in Egypt. Except under peculiar circumstances, such as that of fitting in a narrow tall niche a group which requires more breadth than heighth, or in representations of attendants on gods where the attention of the beholder has to be concentrated exclusively on the principal figure, the enormity is never committed, as in the land of the Pharaohs, of making the king many times larger than his attendants. The relation to each other of the different individuals of a group in close union, or in a long procession, or in a narrative scene,—*i.e.* of the individual to the community,—has been to a great extent borne in mind, and perspective is everywhere attempted to be preserved, though not always successfully. Of four-footed furniture the hind legs are always shown, and receding lines and angles follow to a certain, though small, extent the laws of perspective.

Drapery.

In the delineation of drapery, Orissan artists have also displayed much greater proficiency than those of the ancient schools with whom I have hitherto compared them. The Egyptians were, as already shown, the most defective in this respect. Anything like a graceful fold is nowhere to be met with in their works. The most colossal figures of sovereigns and other great men, such as that of Asymandyas at Thebes, appear all but nude, having nothing more on their persons in the way of dress than a strip of cloth round the waist reaching a little below the middle of the thigh. On many females of rank a line across the legs and another near the neck indicate the limit of the dress, but its texture is nowhere else visible, and the figures, to all intents and purposes, are naked. The tunics on soldiers are indicated by two oblique lines on the sides, but nothing like a fold appears anywhere. The sculptures of Assyria are equally defective in this respect, though the ornamentation on their cloth is more carefully shown than in Egypt. The most ancient specimens of Greek art are in this respect no better. Taking, for instance, the sculptures in the temple at Assos, now in the Museum of the Louvre in Paris, or the Metope from Selinus, representing Perseus and Medusa, now in the Museum at Palermo, or the seated figure of Minerva found at Athens and preserved at the Acropolis, or the statues from Miletus, now in the British Museum, the drapery appears, in a rude symbolical style, without any attempt at imitation of natural folds. If the object of drapery be, "not fully to conceal the body, nor to disfigure its outline and structure, but to harmonise in its folds with the form and organization of the body, and with the grace of its movements, clinging to it and receiving from it its law, just as in music the instrumental accompaniment follows the melody which the human voice gives forth,"—in short, if it be intended as an adornment, and not a cloak, all the three nations named, *viz.*, the Egyptians, Assyrians and the Greeks of the 6th century B. C., failed to employ it in its true character. Orissan artists, on the other hand, worked more freely, and took considerable pains in most of their more finished works to display the folds of dress with every regard to nature; and the success they attained in this branch of art was not small. The folds of the turban, the movement in the floating ends of the [illegible] hymation, the plaited folds of the *dhuti* and *chádá*, the folds of skirts of tunics and *jámá*, as also the wrinkling [illegible] the waist, [illegible], are all delineated with care, and bespeak an artistic knowledge and [illegible] many respects [illegible] to those of the ancient schools.

In the [illegible] of gods the proportions [illegible] down in the Silpa Sástra seem to have been generally, but neither invariably nor very strictly, observed. According to the Mánasára, the entire length of a figure from the crown to the heels should be divided into a hundred and one

parts,* and these are taken as the units of measure by which the proportions of the other parts of the composition should be regulated. The thighs, according to this authority, "should measure two heads, or twice twelve parts in length. The knee-caps should be of the same size as the ears, and the legs equal to the thighs. The foot should be as high as the knee-caps, and slightly arched. Its length from the heel to the end of the great toe should be sixteen instants. The arm of twenty-four instants is reckoned the most appropriate. The elbow should measure two instants, and the forearm eighteen fingers. The hand to the end of the middle finger should be ten instants. The face should include eleven parts, and the neck four parts, or the same as the shoulder from the root of the arm or the expanse of the knee. The upper extremity should measure thirty-six fingers. Twenty instants for the chest from axilla to axilla is the most appropriate; and fifteen for the waist before the navel. The expanse of the hip should be thrice seven instants; and of the waist above it nineteen. The *apamula* (?) should be twelve instants wide; the hip-joint ten and-a-half, and the top of the legs seven and-a-half; its middle six, which will be continuous for four instants; and its lower end three and-a-half. The heel should be four and-a-half fingers. The foot should measure eleven instants. The forepart of the foot should be five instants, but the part along the great toe, should be four instants; the toe itself should be two instants long, and the nail half an instant wide; the second toe should be as long as the first; the third, fourth, and fifth, should successively be three, two and-a-half, and two instants, respectively, or seven, six, and five barley corns, and the nails halves thereof. The middle of the arm should be seven instants, as also the elbow. The mid-forearm should be four instants, and the wrist three instants. The expanse of the palm at the beginning should be six fingers, and its end five fingers, the length of the palm should be six fingers. The middle finger should, likewise, be six fingers long, and the two on its two sides five and-a-half fingers each. The thumb and the little finger should not exceed half the length of the middle finger. Six barley-corns, seven barley-corns, and six barley-corns, should be the thicknesses of the thumb and the fingers respectively."†

The measurements may be thus tabulated—

	Instants.	*Decimals.*
Total length,	101	1·000
Thigh,	24	0·237
Leg,	24	0·237
Foot,	16	0·158
Arm,	24	0·237
Elbow,	2	0·019
Forearm,	18	0·178
Hand,	10	0·099
Face,	11	0·108
Neck,	4	0·039
Shoulder,	4	0·039
Upper extremity,	36	0·356
Chest (width),	20	0·198
Waist (ditto),	15	0·148
Hip, upper part (ditto),	19	0·188
Hip, lower part (ditto),	21	0·207
Hip, joint (ditto),	10½	0·103
Leg, breadth,	7½	0·074

* The term used is *lava* or *tila*, i. e., an instant, it being borrowed from the measure of time in music, very much in the same way in which European artists use the word *minute* for a similar purpose, and reckon the size of particular members of the body by so many heads, parts, and minutes. The word *angula*, or the breadth of the thumb, is apparently employed as an equivalent of *tala*, but to prevent misapprehension I have, in the paraphrase given above, used the word finger: a literal translation is scarcely needed.

† सर्वं क्रमेण मात्राभिः सामस्त्यात् प्रथमते।
ऊरोर्द्वादशपर्व्वाणि तावत्यस्तत्समानि च॥
तत्समं भानुमात्रं स्याज्जङ्घादैर्घ्यं सुखदयम्।
जानु कर्णसमं कुर्य्यात् जङ्घा च ऊरुसमेव॥
पादः जानुसमार्द्धं स्यादङ्गुलैकादशैर्मतः।
षड्डुलात्पार्ष्णिपर्य्यन्तं तलं षोडशमात्रकम्॥
चतुर्विंशतिमात्रं स्याद्दोर्घ्यं प्रथमते।
कूर्परं च द्विमात्रं स्यात् प्रवाहमणिबन्धनम्॥
मध्यमाङ्गुलमेवात्र तलं दशमात्रकम्॥
षडंशं मुखमात्रं स्याद्ललाटं भ्रूसमं समम्॥
नासाग्रं चाङ्गुलं स्यात् आनुविस्तारं तत्समम्॥
चतुष्पर्व्वेण विस्तारं तदर्धविस्तृतं तथा॥
कण्ठस्तारेण विप्रेन्द्र तत्पादार्धं प्रशस्यते॥
मध्ये * * * तारं च षड्दशाङ्गुलं भवेत्॥
पीवरौ द्वौ विशालौ स्यात् विस्तृतावङ्गुलं भवेत्।
नवाधिकं दशाङ्गुलं कटिदैर्घ्यविधायकम्॥
उरुमूलविशालञ्च द्वादशाङ्गुलमिष्यते।
जघनमूलविस्तारं तावद्वृत्तं भवेत्॥
जङ्घामूलविशालन्तु तावत्सप्ताङ्गुलं तथा।
जङ्घामध्ये षडङ्गुलं विस्तारं तु भुजाङ्गुलम्॥
मलकामूलविस्तारं तदर्धादङ्गुलायतम्।
पार्श्वेदाङ्गुलं पार्श्विविस्तारं परिकीर्त्तितम्॥
षड्मात्रिकं च पड्मात्रं प्रदरेति स्मृतं बुधैः।
तलोपरिसमारभ्य पादेभ्यङ्गुलदीर्घकम्॥
द्विपर्वं तत्र विस्तारं तारादर्धसमन्वितः।
तत्समद्वयतत्तुल्यं दीर्घं विस्तारसंयुतम्॥
अङ्गुष्ठं मार्दवोपेतं द्व्यङ्गुलं च क्रमेण वै।
मध्यमादिकविस्तारः दीर्घमेवं प्रशस्यते॥
विस्तारं भागपदत्रयसमानमुदीरितम्।
तदर्धं च तदर्धं च मध्यमिस्तारमुच्यते॥
अङ्गुष्ठपर्व्वविस्तारात् सप्तांशं कुरु तत्र वा।
वेदाङ्गुलं प्रकीर्त्तितं मध्यमं त्रिकरुच्यते॥
षडंशम[illegible]र्द्धं च मध्यमिस्तारमुच्यते॥
सप्तदीर्घं [illegible]
साङ्गुष्ठ[illegible]
[illegible]
[illegible]

	Instants.	Decimals.		Instants.	Decimals.
Leg, middle,	6	0·059	Elbow,	7	0·068
Leg, lower end,	3½	·034	Forearm, middle,	4	0·039
Heel,	4½	·044	Wrist,	3	0·029
Foot,	11	0·108	Palm, breadth (beginning),	6	0·059
Great toe from metatarsus,	4	0·039	Ditto, (end),	5	0·049
Great toe,	2	0·019	Ditto, length,	6	0·059
Second toe,	4	0·039	Middle finger,	6	0·059
Third toe,	3	0·029	Index finger,	5½	0·054
Fourth toe,	2½	0·024	Ring finger,	5½	0·054
Fifth toe,	2	0·019	Little finger,	3	0·029
Arm, middle,	7	0·068	Thumb,	3	0·029

The limits of the different members noticed not being given, the definitions of some of these measurements are not clear, but as far as they are intelligible and definable, they show that the measures given are fair averages of the human body, except in the length of the arm which appears to be excessive, and this, I strongly suspect, is due to an error in the MS. of the Mánasára,—a very corrupt one,—I have at hand to consult; as it does not correspond with the total length of the upper extremity subsequently given. It might, however, be the measure of the perfect upper extremity reaching as low as the knee, which, according to one of the occult sciences ensures to its possessor universal sovereignty; the subsequent measure being ordinary. The palm of the hand, the thumb, and the index and the little fingers are also made a little shorter than they should be. These rules regarding the arm and the finger are, however, except in the case of a few Buddhist statues, never strictly followed; and even as regards them, the adherence to the rules is far from being universal. A large copper statue found at Sultánganj and now deposited in the Manchester Museum, is the most longimanous of its kind, but it has not its arms quite so long as described in the S'ilpa S'ástra.

Its dimensions are—	Ft.	In.
From the top-knot on the crown of the head, along the back to the edge of the heel,	7	3
From ditto, along the front to the sole of the foot under the instep,	7	6
Round the head,	2	0
Top-knot,	0	3
From bottom of top-knot to forehead,	0	2⅛
Length of face from forehead to chin,	0	10
From chin down to waist,	2	0
From waist to sole of foot,	4	0
Round the breast,	6	7
Across the shoulders,	2	4
From shoulder-joint to elbow,	1	6
From elbow to wrist,	1	0
From wrist to end of middle finger,	1	0
Foot, from heel to end of second toe,	1	½

'The above measurements were taken with a common tape without any reference to the principles followed by artists in the calculation of the relative proportions of the different parts of the human figure. They disclose, however, some curious [illegible]ts; the [illegible]mitting the top-knot formed of a collection of hair on the crown [illegible] the head, we find that the total length of the figure ([illegible]) is to the head (12½ inches), as 6⅞ to 1 or in [illegible] language [illegible] artists 6 heads, 3 parts, 9 minutes, instead of the usual st[illegible] of 8 to 1, and also considerably under that of the ant[illegible] statues. In the Hercules, the Apollo, and the Laocoon, the length of the body varies from 7 heads, 2 parts, 3 minutes to 7 [illegible]ds, 3 parts, 7 minutes. The tallest statue known is that of Mirmillo, a[illegible] measures [illegible]ads. The length of the fathom, [illegible]which, in Europe is reckoned to be the same as the height, is [illegible] statue fully one-third [illegible]ng, [illegible]ubt, to the belief common in India that the simian peculiarity of [illegible] reaching down [illegible]nces is an emblem of divinity and universal sovereignty. It is worthy of note, howe[illegible] [illegible]blished by D[illegible]chlagintweit in his recent work on Tibetan Buddhism, the fathom of Bráhman[illegible] [illegible]ented to be greater than the length of their body, and the Bhots have the same peculiarity in a gre[illegible] It is remarkable also that the latter make Buddhas and Bodhisattvas have shorter fathoms than their

genii and dragsheds. The increase in the fathom is effected by an inordinate prolongation of the hands, leaving the arm and forearm less than their natural proportions as compared to those of Indian Bráhmans, of Bhots, and of Bhotanese idols; but somewhat longer than the European standard of 1 head, 2 parts, and 3 minutes to the arm, and 1 head, 1 part, and 2 minutes to the forearm. The foot, according to modern artists, should be one-sixth of the body, but in the statue this has been exceeded by a few minutes. The torso is slightly shorter than the Grecian standard. The artist had evidently adopted the tall North Indian, and not the squat Bhot for his model.'* The proportions of Kártikeya in the Great Tower, are as follow :—

	Ft.	In.	Decimals.
Total length,	6	0	1·000
From crown to navel,	2	4	0·388
Ditto to pubes,	2	10	0·472
From pubes to heel,	3	2	0·527
From navel to heel,	3	8	0·611
Leg, knee to heel,	1	8	0·277
Foot,	0	11	0·152
Knee to hip, *(trochanter)*,	1	8	0·277
Face,	0	11	0·152
Breast, shoulder to shoulder,	2	4	0·388
Arm,	0	6	0·083
Neck,	0	2½	0·034

Putting the rule of the Mánasara, and the proportions of the Sultánganj Buddha and the Bhuvanes'vara Kártikeya by the side of a table published in Mr. Emil Schlagintweit's work on Buddhism, I have the following :—

	Rule in Mánasara.	Kártikeya at Bhuvaneśvara.	Buddha from Sultánganj.	Brahmans of Upper India.	Bhots.	Buddhas, Bodhi-Sattvas of Tibet.	Dragsheds, Genii, Lamas, of Tibet.
Total height,	1·000	1·000	1·000	1·000	1·000	1·000	1·000
Head,	0·108	0·152	0·119	0·145	0·149	0·166	0·160
Periphery round the forehead,	.....	.....	0·285	0·322	0·345	0·350	0·420
Length of fathom,	.....	.....	1·342	1·025	1·069	1·080	1·117
Do. Arm,	0·237	0·250	0·214	0·433	0·451	0·449	0·430
Do. Forearm,	0·178		0·142	0·165	0·164	0·149	0·155
Do. Hand,	0·118		0·142	0·107	0·110	0·110	0·110
Do. Foot,	0·108	0·152	0·148	0·144	0·145	0·140	0·144

The disparities observable under the different heads of the above are so great that I cannot in any way reconcile them. It should be noticed, however, that even in classic art the disparities are also glaring. Bearing also in mind the caprice of nature and of artists, the changes which the human form undergoes from infancy to old age, and in different nationalities, climates, habits, and professions, as also the exigencies of art, it must be admitted that such measurements cannot be fixed by any ideal standard, nor can any deduction of material importance be drawn from them. This much, however, may be said that the human figures appear generally to be well proportioned; their hands and feet are small, the arms are in keeping with the body, and the lower limbs are divested of the great length so ungainly and peculiar to the aboriginal form. In several figures which have been measured, the feet are, all but exactly, one-sixth of the body, and the hand two-fifteenths. The feminine hands are generally very small, and the fingers light and taper. In his statues the second toe is in many instances somewhat longer than the great toe.

The great bulk of the sculptures in Orissa are in low relief, [illegible] one-eighth to one-fourth of the round. Some are in high relief or alti-rilievi [illegible] more than three-fourths of the round attached to a back ground; while a few are entirely round [illegible] of gods are of the last description. On friezes the nature and exigencies of architecture do not admit [illegible] the bas-

Relief.

* Author's paper on the Buddhist Remains of Sultánganj in the Journal of the Asiatic Society of Bengal, [illegible]

est parts of the different figures being on one level; but in niches, both attached and isolated figures are arranged on different levels and heights, so as to secure such a distribution of light and shade as to produce some amount of aerial perspective. This trait bespeaks a considerable advance in the theory and practice of the plastic art, which the Egyptians and the Assyrians never reached. Among the Greeks too, says Dr. Lübke, "the relief is restricted to one uniform level, and to the representation of only two figures side by side."*

Colour.

In figures of gods and goddesses in Orissa, as well as in other parts of India, the eyes, eyebrows, and sometimes the lips, are the parts which are generally painted; the colour of the rest of the body being left to be represented by that of the material of which the figures are made. In metallic figures painting is also limited to the same extent; but in wooden statues the whole is very thickly painted, or gilt, so as entirely to cover the original material. To what extent this rule was followed in the setting off of ornamental sculpture, it is impossible now to determine. A basso-rilievo horseman in the Dancing Hall of the Great Tower at Bhuvanes'vara is painted all over, so are some figures in the Dancing Hall of the Puri Temple. But with those exceptions, there is nothing to show that the lavish profusion of sculptured ornaments which are to be met with in every part of Orissa, ever had any painting on them. I carefully examined every nook and cranny—the deepest recesses of niches—to find traces of pigments, but found none; and the surfaces of finished statues, whether placed indoors or on the outside, bear no mark of ever having been painted. It may be presumed, therefore, that architectural and ornamental sculptures were not set off with paint. It should be added, however, that the bulk of those sculptures have been exposed to tropical rains for near twelve hundred years, and it is futile now to expect any trace of paint on them, even if they ever had any.

Obscenity.

In describing the merits of Orissan art I must not forget to notice the despicable taste which the artists have displayed by making some of their figures most disgustingly obscene. By this I do not refer to their nudity, for, as justly observed by professor Lübke, "the task of sculpture is to conceive man in his full natural beauty. Hence the nude figure in its strictest sense is required. The perfect harmony and beauty of the whole can only be displayed in the unclothed form." This canon has been more or less accepted by artists and men of taste in every age and clime, and the Uriyás have rather evinced a true sense of the proper sphere of sculpture by chiseling the nude, and not thereby given offence to good taste.† But they have added thereto certain licentious representations which do not admit of description. Their number is small, and they by no means enter into the general scheme of ornamentation of the temples; but there they are; and their existence cannot but offer a violent shock to all modern sense of propriety and decency. I enquired of many learned paṇdits at Puri, as to why such offensive figures had been allowed to desecrate the sanctuary of the Divinity; but they could tell me nothing worth hearing. In one instance obscenity in a temple has been accounted for on the supposition of its being expiatory. In a note on Kajraha with reference to Rashiduddín's mention of that town, Sir Henry Elliot states that "in the Prithviráj Ráyasá mention is made of a Bráhmaṇ woman, Hemavatí by name, who had committed a little *faux pas* with the moon in human shape, and, as a self-imposed punishment for her indiscretion, held a Bándá jag, a part of which ceremony consists in sculpturing indecent representations on the walls of temples, and holding up one's foibles to the disgust and ridicule of the world."‡ The story occurs in the 1st Canto of the Benares MS. of Chand, and in Mr. Growse's translation of it,§ mention is made of the Bháṇḍava sacrifice, but without any allusion to indecent representations on temples, and I can nowhere find a description of the ceremony in any Sanskrit work. Possibly there may be some authority for it, and the obscenity on Hemavatí's temple at Khárjinpur or Kajraha might be accounted for on the supposition that she wished to expiate her fault by a disgustingly public confession. But it is scarcely to be supposed that all the principal sculptured temples of Orissa owe their indecent ornaments to a like cause, and I am disposed to think that the explanation is more ingenious than true. It is much more probable that the indecent figures on the old Central Indian temples were due to the same cause which produced them in Orissa. What that cause was, it is difficult now to say with perfect certainty. A vitiated taste aided by general prevalence of immorality might at first sight appear to be the most likely one; but I cannot believe that libidinousness, however depraved, would ever think of selecting fanes dedicated to the worship of God, as the most appropriate for its manifestation; for it is worthy of remark that they occur almost exclusively on temples and their attached porches, and never on enclosing walls, gateways, and other non-religious structures. "Our ideas of propriety," according to Voltaire, "lead us to suppose that a ceremony" (like the worship of Priapus), "wh[illegible]s so infamous, could only be invented by licentiousness; but

* History [illegible]

† If of th[illegible]riginator and great master of the [illegible]ty, the citizens of Oxus decided to take the draped fi[illegible]est of the two, the people of Cnidos refused to give up the nude one, the renowned Cnidian Venus, even to ransom their city from foreign conquerors.

‡ Muhammadan Historians, I., p. [illegible]

§ Journal As. Soc. XXXVII., Pt. I., p. 121.

it is impossible to believe that depravity of manners would ever have led among any people to the establishment of religious ceremonies. It is probable, on the contrary, that this custom was first introduced in times of simplicity,—that the first thought was to honor the deity in the symbol of life which it has given us; such a ceremony may have excited licentiousness among youths, and have appeared ridiculous to men of education in more refined, more corrupt, and more enlightened times," but it never has its origin in such feelings. Besides, vicious propensities have, in India, been everywhere and at all times most emphatically denounced, and there is no creed known in this country which does not condemn it as hateful. It is out of the question, therefore, to suppose that a general prevalence of vice would of itself, without the authority of priests and scriptures, suffice to lead to the defilement of holy temples. A religious sanction for it must be sought, and this, I believe, occurs in the fact of most of the temples on which the offensive figures are shown being dedicated to the mystical adoration of the phallic emblem. From a very early period in the history of religion, the phallic element has held a prominent place in the mind of man. Most of the leading religions of the ancient world—the Egyptian, the Chaldean, the Assyrian, and the Mosaic—manifested it in some form or other; and in primitive unsophisticated states of society, when philosophical conceptions of the mystery of generation "had not yet given to the various parts and members of the human body, those names which constitute the special vocabulary of obscenity of the present day, many symbols and representations were not only held inoffensive, but sacred," and their presence on ancient monuments, therefore, cannot be a matter of surprise. According to Dulaure the symbolic figure carried in procession during the festival of Osiris and Isis, (Is'vara—Siva, and his consort I's'á) was a representation of the phallus of the bull.* In the Old Testament, allusion is made to Jewish women manufacturing phalli of gold and of silver.† In an interesting memoir on the worship of Siva in Europe in former times, Professor Holmboe cites an extract from an ancient history of King St. Olaf, who introduced Christianity in Norway, in which mention is made of a pagan family residing in the province of Nordland, "qui adorait le linga d'un cheval, qu' on avait tué, mais dont on avait conservé le veretrum. Les soirs cette pièce passait de main en main non seulement parmi les personnes de la famille, mais encore parmi les hôtes qui pussent être presents, chaqu 'un récitait un verset en délivrant l'idole á un autre."‡ In one of the apartments of the great palace at Karnak, there are several figures representing "une offrande d'un heros Egytien á la grande divinité de Thébes au Dieu regénérateur caractérisé par le membre viril en érection,"§ and these are repeated in the interior of its great granite Propylon and other places. In obscenity they are scarcely inferior to the works of the Uriyá artists.

These and innumerable other instances which could be easily multiplied, were it worth while, suggest the conclusion that the public exhibition of the phallus in the early ages had nothing in it which partook of indecency. "All ideas connected with it were of a reverential kind. When Abraham, as mentioned in Genesis, in asking his servant to take a solemn oath, makes him lay his hand 'under his thigh,' it was that he required as a token of his sincerity his placing his hand on the most revered part of his body; as, at the present day, a man would place his hand on his heart in order to evince his sincerity. Jacob, when dying, makes his son Joseph perform the same act. A similar custom is still retained among the Arabs. An Arab, in taking a solemn oath, will place his hand on his membrum virile in attestation of his sincerity."‖ Thousands upon thousands of Hindus—men, women, and children—visit the Orissan temples every year; they undertake long and tedious journeys in the most inclement of Indian seasons; undergo the greatest privations, to have a sight of them; and return home with the firmest conviction that they have by the pilgrimage freed themselves of all their sins, without even indulging in the merest shadow of an idea, that there is any thing improper or indecorous in all that they have seen. The whole to them is a mystery—a mystery of ancient times hallowed by age and enveloped in everything that is pure and holy,—and none attempts to lift the veil, and pry into secrets, or their causes, which his ancestors for centuries left untouched. You may point out the offensive character of the representations before him, and create a cloud of anxiety and uneasiness in his mind, but it is only a passing cloud that soon melts away before the fervour of his faith.

Looking to these facts I am induced to believe that the offensive figures are due to a desire to typify a religious idea, and not to an inherent vicious taste in the artists¶ or their employers. It was not "to incite, excite, or gratify the lower feelings of the public," "to lower art to unworthy purposes by objectionable representations," but to symbolize a religious idea,

* Dulaure's Histoire abregée de differens Cultes, p. 72.
† Ezekiel xvi. 17.
‡ Journal As. Soc. XXXVI, p. 182.
§ Description de l' Egypte, Vol. III., Plates 36 and 47.
‖ Journal of Anthropology, No. I., July 1870, p. cxl.
¶ By this remark it is not at all my wish altogether to exonerate the artists from some prurience of imagination. Few artists of note have been above it. Even the renowned Phidias succumbed to it when he carved nude females

reading in a pron[illegible]osition on supine youths on the throne of his glorious [illegible]—a work of art, which according to the Stoic Epictetus, "it [illegible]ed a misfortune [illegible] his contemporaries to die without [illegible]that the figures [illegible] not positively known. Accord[illegible] they were Sp[illegible]hers took them to be Hercules and Theseus [illegible]er they might have been, they were certainly [illegible]

that the offensive sculptures were carved; and this was done without any perception of their offensive character. This is the more apparent in the circumstance of all the other ornaments being chaste, and their disposition thoroughly artistic. Tendrils and young leaves, flowers and fruits, pretty birds and pet animals, young children and youthful maidens,—the most graceful objects in nature,—have everywhere been selected for ornamentation, and they have been so combined as to produce the most striking effects. They have been, perhaps, more profusely employed than the classic taste of the Grecians would have permitted; but the accumulations being harmonious are not displeasing, and the main object being magnificence, they could not well be avoided. It may be added also that no object has anywhere been represented which is not calculated to inspire a sense of beauty in the beholder. The Romans made a grave mistake in this respect by placing skulls of men and oxen with cross bones between their triglyphs as objects of beauty. Long association may have altogether deadened the repulsiveness of those objects to the European eye, but as Ruskin pointedly observes, "We may keep a skull besides us as long as we please; we may overcome its repulsiveness; we may render ourselves capable of perceiving many qualities of beauty about its lines; we may contemplate it for years together if we will, it and nothing else; but we shall not get ourselves to think as well of it as of a child's fair face."* Nothing of the kind occurs in Orissan temples. Grotesque forms and unnatural combinations are not uncommon, but they are by no means more obtrusive than in Greek or Roman art, and if the religious element and its monstrous conceptions could be eliminated, there would be little that would be disagreeable or unpleasant. It is worthy of remark also that at Bhuvanes'vara this religious element is not particularly prominent; and the bulk of the ornaments have been copied from nature, and arranged with considerable study and refinement of taste.

Carving *in situ*.

In carving the ornaments, the Orissan artists followed the Assyrian plan of working *in situ*, and not the Egyptian one of preparing the sculptures in their ateliers, and then fixing them in their proper places. The temples were first built with a casing of carefully dressed ashlars, the largest blocks being placed where large statues were to be carved, and the sculptures traced and cut after the buildings were completed. This is evident from the number of tracings existing on temples which circumstances afterwards prevented the artists from cutting and finishing: this plan was also followed in the ornamentation of the Sárnáth Tower and the Bhilsá Tope. This doubtless must have entailed stupendous labour, but it minimised the risk of injury to finished works. Three lions on the shaft of the Konárak Temple measure eighteen feet in length each, and were originally placed at a height of over sixty feet above the level of the surrounding country. In rough block each of them must have weighed over ninety tons, and when being lifted to their places they must have been subjected to an amount of rough usage, which could never have spared the integrity of any carved work. In the case of ornamental bands and small bas-reliefs, the risk of injury, it is true, was not great; but in the absence of cement, it was necessary for the sake of strength and solidity in the temples to adopt the course under notice. The rule, however, did not apply to the images of gods in the sanctuaries, and also to some of the more finished statues in niches, which were evidently first carved in the shops of the artists, and afterwards removed to the places designed for them.

Toreutic Art.

Reference has been made above to the copper statue of Buddha found at Sultánganj.† It is the largest metal figure of ancient times that has come under observation in this country. In artistic execution it is in no way inferior to the ordinary run of stone statues of Buddha found at Behar, Sárnáth, and other places in Northern India, showing that the people at the time were as competent in carving in stone as in modelling and moulding. But the most remarkable circumstance in connexion with it is the evidence it affords of the capacity of the people in melting and casting copper in such large quantities as to produce figures seven feet four inches in height. So extraordinary and improbable did this circumstance appear to some of the European officers of the East Indian Railway Company, when the figure was discovered, that they took it to be of Birmingham manufacture sent out to this country for sale. There is, however, no doubt now about its Indian and ancient origin. Other figures of copper have been found, and there is ample proof in the ancient copper weapons of war that that metal was largely worked by the people of former times. It must be added, however, that on the whole, copper was never very largely used in the fabrication of statuary, and bronze never, that alloy being held impure. Brass is more readily melted; it has more attractive colour; it takes a finer polish, and is firmer, more malleable, less liable to rust, and more easily wrought than copper. It has, therefore, been generally preferred as a material for ornamental figures. In the formation of the statues of gods, it is als[illegible] employed; but in such cases it is alloyed with small quantities of six other metals, viz., g[illegible] iron, tin [illegible]ury, making, with the copper and zinc of brass, eight, which is esteemed t[illegible]ery highly as *ashṭadhátu*. Statuettes of pure gold or silver were also made, and in the S'ás[illegible] bestow[illegible] those who worship idols made of them; but no authentic ancient figure of the precious

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[illegible]der[illegible]ers, II., 30.

† *Ante* page 64, and the Journal of the Asiatic Society of Bengal, XXXIII., 360.

metals has come to my notice. The Tantras recommend lingams made of mercury as the most sacred; but I have seen none, and know not how the metal was manipulated:—probably it was used in the form of an amalgam with lead or tin. In Orissa the metal figures of gods and goddesses are mostly of brass, and a few of ashtadhátu. They have been made by being first cast in moulds, and afterwards finished by chiseling and filing. The large figure of Lakshamí in the Great Temple of Puri affords the best specimen of its kind, and figures from 1 to 2 feet in height are met with in some of the minor temples. But, generally speaking, the execution of metallic figures of the Uriyás is inferior to the better specimens of their stone sculpture, and the size of such figures is generally so small that they are not worthy of any lengthened notice as specimens of the toreutic art. Nothing need also be said of legends on coins, inasmuch as no indigenous coin of an ancient date has yet been found in Orissa. Metallic figures have been little employed for ornamental purposes, except as feet for thrones, stands for lamps, and for other articles of domestic use. But in their case the execution is of a very primitive kind.

The researches of James Prinsep have clearly demonstrated that some of the Hindu princes of the first century of the Christian era borrowed their numismatic devices from the Bactrian Greeks. They failed, however, to preserve the beauty of the original designs, and in a few centuries so entirely debased them as to render them irrecognisable. To what extent this importation of the art of die-sinking reacted on Indian toreutic art generally it is impossible now, in the utter absence of authentic, ancient, dated specimens, to determine. The only work of real value known is the Sultánganj Buddha; but it has no date on it. Probably it is from sixteen to eighteen hundred years old; and such as it is, it has no trace whatever in its composition of Greek art. None of the metal figures of gods and goddesses in ancient temples now extant, can confidently be said to be of a greater age than a thousand years: the great majority of them are about half that age; and their forms are strictly Indian.

Origin of Indian plastic art.

Of plastic art, a few specimens have been from time to time met with towards the North-Western frontier, which bear more or less traces of Greek character on them. Some time ago a few images were found in the Eusufzai country, which in style and execution seemed very like debased Greek works.* A figure of Buddha in slate stone, found by Dr. J. G. Gerard in the ruins of an ancient town two miles S. E. of Cabul,† is supposed by some to have marks of genuine Bactrian formation. A stucco head found in Peshawur, and exhibited by Major Baker at a meeting of the Asiatic Society of Bengal, in November, 1851, was also supposed to have the same character.‡ The peculiarities of these figures are, however, not so decidedly Greek, as to leave no room for question. The same cannot be said of a remarkable piece of sculpture in red sandstone found at Mathurá by the late Colonel L. R. Stacy, and now deposited in the Indian Museum. It represents a large tazza, surrounded by two groups of men and women. The bowl of the tazza is broken; the figures have suffered much from decay; and their faces have been knocked off by the iconoclastic zeal of some fanatics. Enough, however, remains of the whole to attach to this piece of carving peculiar interest in connexion with the history of Indian plastic art. Apparently it embodies the most curious mixture of Indian and foreign ideas and objects that has ever come under notice. Its material, the mottled red sandstone, is the same which Huvishka used in the construction of his great monastery at Mathurá over nineteen hundred years ago, and which the Moghols employed in the erection of their forts at Delhi, Agra, and Allahabad. The Hindu fort of Gwalior, and the ancient temple of Govindaji at Vrindávana, are built entirely of this stone, and innumerable Hindu and Pathan edifices along the banks of the Yamuná attest the fact of its being an Indian material, and the sculpture under notice having been made in India. But a tazza, as an article of decoration, as far as there are means of judging, was

* Journal Asiatic Society, XXI., p. 606.

† The figure is now preserved in the Indian Museum, and is thus described in its Catalogue: "No. 840. A figure of S'ákya in the usual sitting posture of deep meditation, clothed to the neck in a thin flowing drapery; flames of sacred fire appear on his shoulders, and a circular glory surrounds the whole." Catalogue of Curiosities, p. 47.

‡ The following is an extract from the late Mr. Welby Jackson's remarks on the same: "The head is of a superior character in every respect; the eyes open and intelligent; the nose well-formed; and the nostrils open and well articulated; the upper-lip short; the lips well and sharply defined; and the mouth bearing a pleasing and intellectual expression; the head, too, is correctly modelled, shewing some knowledge of the art of sculpture; the ears are concealed by the full curls of the hair, which hangs loosely on each side of the head, the curls being well and sharply executed; on the head is a cap or fillet; the two sides being apparently connected by the principal band which goes round over the forehead; but the upper part open, allowing the hair to appear and fall over the band just above the forehead; the sides of the cap are divided into lozenge-shaped projections from the surfaces, representing some kind of ornament; where these sides join the band or fillet, I think something has been broken off; the countenance is handsome and pleasing in its expression, either in profile, or in full face;—the material is a dark stucco or cement, not so easily broken as that of [illegible] XIX., and of better and finer ingredients; indeed the sharpness of the [illegible] is surprising, considering its antiquity. I cannot [illegible] with more data what or whom this head No. 2, is designed to [illegible] is evidently not a Hindu head: and on comparing it with [illegible] early Bactrian co[illegible] appears to be a great resemblance, [illegible] sufficient [illegible] think it belongs to that period. The expression of the face [illegible] not a pure Greek countenance.

unknown in ancient India, and it may therefore be accepted as a proof, as far as such a proof can go, of the presence in India of foreign artists. The subject of representation on one side (obverse) of the stem of the taxza is a pot-bellied, stout man, seated in a wine-befuddled style on a rock, or a low stool, with his hands resting on an attendant standing on each side. "The drooping of the head, the lips, and the powerless state of the limbs," says Col. Stacy, "give an extremely accurate representation of a drunken man." For dress he has only a *dhuti*, negligently wrapped round his loins below the abdomen, leaving the paunch uncovered and projecting. His feet are partially mutilated; one leg is raised, the other is hanging. Round his head he wears a chaplet of angular-lobed leaves. The attendant on the right side is a male, dressed in a *chápkan*, and having a square scarf tied in front of the neck by a knot, very much in the same style in which the *pítha-vastras* of the associates of Krishna are represented in the present day, and also in old sculptures. Cowherds in the North-Western Provinces tie their blankets also in the same way, and Indian boys, until recently, had their little *chádars* tied on them in the cold weather in a like manner. The writer of this work himself had it when a boy. Col. Stacy describes it as "a kerchief round the neck with a tie in front as worn by sailors."* General Cunningham takes it to be "the short cloak of the Greeks."† The head and left arm of the figure are mutilated; the right hand is stretched behind the central figure for its support. The attendant on the left side is a female, supporting the right hand of that figure on her breast. She is dressed in a *sárí*, whose ample folds lie gracefully on the lower limbs, covering them to the heels. A jacket is seen over it, probably a *kurtá*, which looks like an Ionic chiton with short sleeves, but without the usual girdle. The two articles of dress together appear very like the double chiton with an ample and flowing *kholpos* (κόλπος). It is evident, however, that the lower garment is not a Greek petticoat, but a *sárí*, as the upper end of it passes diagonally over the breast and the left arm, whence it hangs down behind the body. She has no himation or scarf over her body clothes. Her feet are covered by the skirt of the *sárí*. A necklace of five rows adorns her breast, and thick heavy jewels are pendant from her ears. The face is mutilated. Before her stands sideways a nude boy with his right hand resting on the thigh of the central figure. Before the male attendant there is also a boy, standing in a dancing attitude with the right hand uplifted. The heads of the boys are broken. Before the principal figure, there is an Indian *lotá* or flagon, apparently serving the purposes of a bottle. On the reverse there are four figures, two male and two female, standing under an umbrageous grove whose foliage is made up of long, lanceolate, pinnate leaflets hanging in masses, and relieved with globular tufts (capitulums) formed of small flowers. The leaves can be likened to the young shoots of the *Jonesia asóka*, but the flowers are more like those of the *Nauclea kadamba* than of the former. The first figure to the right is a female, dressed in a *ghágrá* much in the style of the female attendant already noticed, but having a narrow long *chádar* thrown across the body. Her feet are encased in shoes, and there are thick heavy rings round her ankles. Her left hand holds the hem of her mantle, and the right is in the grasp of a youth, who stands besides her in an amatory mood, with crossed legs, resting his left hand on her shoulders. He is dressed in a close-fitting *dhaṭá*, or *janghi*, which simply covers his nudity, extending only to about the middle of the thighs, but leaving his protuberant paunch exposed, and a scarf or *pítha-vastra* tied before the neck and hanging behind the body. His feet are bare. The third figure is a female dressed exactly as the first, but she has elaborately-worked bangles, which cover nearly half the length of her forearms. Her left hand holds a lotus-bud, and the right hangs down straight by her side. Near her feet there are two covered vessels, one on each side. The youth who stands next to her on the extreme left, does not appear to be in any way interested in her. He has no shoes, and on his person is a flowered muslin *chápkan* which hangs down to the knee. A little above his ankle there are marks showing that his nether garment is a pair of close-fitting drawers or *páyajámá*. All the four figures show traces of chaplets which had crowned their heads. The leaves of these crowns are angular-lobed, and may be taken for vine or ivy.

Col. Stacy took the portly, seated figure to be "Silenus inebriated," and the whole to be "a scene in the Bacchanalian festivals." James Prinsep supported the conjecture by observing that "there can be no doubt as to the personage represented by the principal figure; his portly carcass, drunken lassitude, and vine-wreathed forehead, stamp the individual; while the drapery of his attendants pronounces them to be at least foreign to India." He had grave misgivings, however, about the costume of Silénos himself, which he thought to be "certainly highly orthodox and Brahmanical." General Cunningham does not notice the *dhuti* of the principal figure, and is disposed to side with Col. Stacy and Prinsep. Of the figures on the reverse, he says: "The Greek-clad male figure may p[illegible]ns, but I am unable to offer even a conjecture as to the figure in the tunic."‡

The argu[illegible] on which [illegible] theory o[illegible] guished antiquarians is founded, are:—1*st*, the general excellence of the scul[illegible]*nd*, the [illegible] of the principal figure; 3*rd*, the dresses of two of the male figures; 4*th*, ditto of

* V., p. 567. † Archæological Report, I., p. 243. ‡ Archæological Report, I., p. 243.

the females; *5th*, the vine-leaf crowns; *6th*, the foreign character of the tazza. None of these arguments, however, is such as to leave no room for doubt, and people in this country may well question their accuracy.

1st.—They may very reasonably say that the first argument involves a *petitio principii*. The question at issue is whether this excellent piece of carving, found in India and made of Indian material, can be taken as a specimen of Indian art, and it is begged by the assertion that it cannot be Indian, because it is so excellent. Had the condition of Indian plastic art two thousand years ago in the different parts of India, and among the different classes, castes, and nations, been exactly known and ascertained, the case would have been otherwise; but that being a moot question, the argument appears to be no better than that of the East Indian Railway officers, who said the copper Buddha of Sultánganj (*ante* p. 65) must be of Birmingham manufacture, because the Indians could not cast so large a statue in copper. They may also add that, superior as the character of the sculpture is, it has nothing in it of the Greek art of the third, or the fourth century, B. C., and James Prinsep very properly remarked that "if the sculptor were a Greek, his taste had been somewhat tainted by the Indian beau ideal of female beauty."

2nd.—The second argument is founded on the maudlin character of the principal figure. It presupposes that an Indian artist could not possibly conceive a drunkard. But the natives may say in reply that drinking and drunkenness was very common in India two thousand years ago, so much so that large quantities of foreign wine had to be imported for the gratification of the higher orders of the people,* and the representation of a drunkard by an Indian artist, therefore, is by no means a very improbable feat. But what is more, one of the most favoured gods of the people, Baladeva, was a noted drunkard, who never appeared before the public without being the worse for liquor.† He was of a big, burly, portly make, ill-clad, or sparingly clad, as became a shepherd boy, and crowned with leaves and flowers. His idols are generally represented with a drinking cup in his right hand. Several European scholars have very aptly nicknamed him the Bacchus of the East. He was born in the Mathurá district, and an image of his in a state of drunken lassitude, with a flagon of wine before him, cannot be taken to be other than a very appropriate Indian subject. With all his fondness for spirituous liquors he was, however, celebrated for his constancy, and the presence in the scene, therefore, of his wife, who always shared in his potations, and his two young sons, is by no means extraordinary, and no one will deny him an attendant to hold him up and prevent his falling from his seat.

3rd.—The so-called "sailor's scarf" tied by a knot in front of the neck is a veritable Indian dress of the lower orders, the *piṭha-vastra*. It is especially assigned by Indian poets to Krishṇa and his shepherd associates. In scenes representing the early lives of Baladeva and Krishṇa, those personages are invariably dressed in the present day with this article of attire. It may appear like a short Greek cloak, but in reality it is not a made dress, but a square scarf tied by the two upper corners round the neck, and not secured by a clasp or *febula*.

4th.—They can urge the female dress to be also Indian, and not Grecian. The so-called chiton is no other than the *kurtá*, and the under dress, a *ghágrá* or *sáṛí*: it falls heavily down to the ground covering the feet, and is not parted on the thigh, exposing a part of the limb, as is so peculiar and charming in Greek sculptures. The scarf over the dress is the long Indian *uḍná*, and not the square Greek himation, or *pallium*. The skirt of the *kurtá* appears a little more closely folded than is common in the present day; but there is little in it that will make it unmistakably Grecian, and nothing else. Admitting, for the sake of argument, that this article of dress is a chiton, and not a *kurtá*, the natives may be disposed to ask, how is it that the artist assigned to Greek Bacchantes the attitude of Indian women, and loaded them with thick ankle-rings, large bracelets, heavy earrings, and five-rowed necklaces? For Greek ladies of the time of the Indo-Bactrians sandals would also be more becoming and national than shoes which, according to the *Mrichchhakaṭaka*, were common among Indian women.

5th.—The fifth argument may be very well combated in the same way. Rude outlines of angular-lobed leaflets are by no means such decided indications of the character of the plant they are taken from, as not to leave a considerable margin for speculation. Col. Stacy took them for vine; but General Cunningham is undecided as to whether they represent vine or ivy. Supposing they are vine, it does not follow that the argument founded upon it becomes conclusive. Grapes and grape wine were very well known and in use in former times; and vine leaf may be delineated by an Indian artist as an accessory to a drunken man. Were this not the case, still Indian flora is not so poor as not to yield at least a hundred different plants with angular-lobed leaves to supply patterns for leafy crowns; indeed were it not for the association of the idea of leafy crowns with vine and ivy in European writers, it is doubtful if the thought of [illegible] vine or ivy would have ever occurred from a mere sight of the symbolical outlines on the figures. The readers [illegible] *gñsa*, the *Bh*[illegible]*ta*, and other Vaishṇava works

* Spirituous Drinks in Ancient India, in the Journal of the Asiatic Society of Bengal, XLII., Part I, p. 1.

† *Vide* my paper on a P[illegible] Ancient India [illegible] of the Asiatic Society of Bengal, XLI., Part I. p. 310.

know well how frequently are crowns of wild flowers and leaves mentioned as ornaments for Baladeva, Krishna, and their boon companions, and to Indians, therefore, the argument is of very little moment.

6th.—The last argument appears at first sight to be a very strong one; the Hindus were never very fond of tazzas, and such a vessel at once suggests the idea of the Greeks and the Romans. But a careful examination of the bowl of the vessel (the stem is not visible) does not show the argument to be quite conclusive. A shallow patera-like basin for a fountain is by no means thoroughly un-Indian. The people of this country have always been fond of fountains, and frequent mention is made of such *jets d'eau*, in ancient Sanskrit works; and the so-called tazza may very well be taken for the base of an unfinished fountain. The piece of sculpture is too large and heavy for a receptacle for wine; it could not be moved about without the aid of several persons, levers, and cordage; and few would like to keep wine in an open shallow vessel of the kind made of a porous stone which would absorb the whole of its contents in a few hours. Taking these circumstances into consideration those who deny the Greek character of the sculpture may urge that it was intended for an ornament for a garden, or a bower, to be kept permanently fixed in an open place, and as such, it would best serve the purposes of a fountain.

As to the subjects intended to be represented by the figures, the oppositionists may contend the obverse to be a scene in the life of Baladeva, and the reverse, another of the same divinity, or, more probably, one of his brother Krishna—scenes which have been endeared to the people by ten thousand different associations. To a Hindu, a figure with crossed legs, dressed in a *dhaḍá* and *pîṭha-vastra*, engaged in amorous dalliance with a damsel, cannot appear as other than that of the ardent lover of the milkmaids of Vrindávana in the society of his beloved Rádhá, and the other two as companions of the love-smitten swain and his mistress. The milkpails with which the two young shepherdesses had started from home, probably with supplies for their customers, but which they have laid down by their feet upon being diverted from their destination, bespeak their true character. The indifference with which the two figures on the left regard each other, shows clearly that they are mere attendants, and not active participators of the joys of the assignation. If the principal figure be taken for Baladeva, the reverse will be a scene of enjoyment, and the obverse a retribution for over-indulgence.

There is one circumstance, however, which melts all these arguments into thin air: both the principal figures have traces on their chins of a curly beard, and no Hindu divinity, nor any Hindu householder or man of pleasure, has ever been represented, either in poetry or in plastic art, with such an appendage to his face. The Hindu Sástras have invariably and uniformly assigned the beard to houseless hermits and sages who have renounced the pleasures of the world, and there is no reason whatever to suppose that there was any exception, or that the sculpture is intended as a satire on a hermit. It must follow, therefore, that the scenes delineated are foreign, and most probably those of some passages in the life of Silénos. The figures are decidedly Bacchic, and the beard, the cantharus, the vine crown, and the tazza, are very appropriate emblems and accessories to indicate their characters. To account for the Indian character of some of the details, I believe the sculpture to be the handiwork of an Indian artist working for a Bactrian or Greek employer, just in the same way in which Indian artists, working for General Claude Martin produced the "Constantia" house at Lucknow, bastardising a Muhammadan building with corrupt Renaissance ornaments and decorations. A drawing of the design was given by the employer, and the artist worked it out in the best way he could, with such additions and alterations as his Indian ideas of the requirements of art suggested to him. General Cunningham is of opinion that the sculpture was produced by a foreign artist—one "of a small body of Bactrian Greek sculptors who," he conjectures, "found ready employment for their services amongst the wealthy Buddhists, just in the same way as goldsmiths and artillerymen afterwards found service with the Moghal Emperors;"* and it is undeniable that during the supremacy of the Græco-Bactrians in North-Western India for about a century, Greek works of art were produced in a more or less debased state for Huvishka and his successors. But neither the conjecture nor the probability suffices to account for the local character of so many of the accessories of the sculpture. A Greek or Bactrian artist, working for a Greek or, a Bactrian, employer, would be the last person to design heavy earrings, thick anklets, five-rowed necklaces, Indian *dhoti*, Indian *páyajámá*, Indian *chápkans* of flowered muslin, Indian *chádars*, and Indian shoes for a Grecian demi-god and his attendants. A local cause for them must be sought, and I believe the Indian nationality of the artist offers the most probable solution of the difficulty, the Greek "feeling" of the work being accounted for by the design. But whatever the origin of [illegible] and the other works named above, there is nothing in them, nor a tittle of evidence of any kind to show that they gave [illegible] to the plastic art in this country, or even appreciably influenced its character. Outlines of human forms must be, from [illegible]re, similar wherever produced, but "even as in music the same tune assumes different styles under di[illegible] treatm[illegible]an easily make out, not only such styles, but their imitations,"

* Loc cit.

so in the plastic art there are styles and their imitations which are determinable; but as yet no one has noticed any unmistakable and certain trace of a Greek or Bactrian style or imitation of it in Indian sculptures. The little that has been noticed in the specimens above named are peculiar to them, and them only, and not to be found in the bulk of the sculptures of this country, which have their own special peculiarities,—peculiarities which mark them as strictly indigenous, and perfectly independent of foreign art. Hence it is, I believe, that Mr. Westmacott came to the conclusion that, "the conquests of Alexander the Great do not appear to have exercised any important influence on the art of India, by introducing new forms or improved principles of beauty." Professor Lübke, who is a strong advocate of the Alexandrine theory as regards Indian architecture, and supposes that "the Asoka columns point most remarkably to the influence of Western Asia,—that is, the Babylonic Assyrian,—which might certainly have resulted from Alexander's march of conquest," admits "that if this be the case, still in the earlier Indian civilization of which we certainly have but few traces, distinct national forms of art must have been already developed, and these Buddhism immediately transformed into monumental importance."* Mr. Ackland, in his "Manners and Customs of India" (p. 121), after adverting to the Greek character of the Hátigumphá inscription of Udayagiri, explains how the Greek record came to the country by asking himself, "whether it is possible, that when Alexander was stopped by the Afghans, any of his people ventured still further into the country, and after various wanderings, founded Cundagurree, as conquerors of the district?" He also states that he had seen some Roman emblems on the sculptures there. But as James Prinsep has already demonstrated the inscription to be Páli, and the careless writer, who fancied that Alexander's march "was stopped by the Afghans," has not described the particular emblems which he took to be of Roman origin, it is not worth while to refute his statements in detail.

Libels against Indian Art.

Nor is it necessary here to notice at length the libel published by Müller, in which he sees art in India, "roaming about with inconstancy amid an abundance of forms, and if it almost by accident lights on the simple and grand, is incapable of using and carrying it out as an established and recurring form of art; so that it is difficult to get rid of the idea that the architectonic and plastic sense in India was only awakened by impulses and communications of various kinds from without (probably from the Greeks or Javans), and that a nourishment was presented to it, which, however, it could not rightly digest;"† nor that of his translator, who describes "the enormous pantheon at Ellora, in the Ghaut Mountains, destined at the same time for the reception of a hundred thousand pilgrims," (!) and notices in it "inverted acanthus capitals." In the absence of information and accurate drawings such mistakes, perhaps, could not be prevented, and the writers, therefore, were to a great extent helpless. Mr. Gwilt, comparing the essential differences between Indian and Egyptian architecture, quotes a passage from the *Encyclopédie methodique* which says: "In Egypt, the principal forms of the building and its parts preponderate, inasmuch as the hieroglyphics with which they are covered never interfere with the general forms, nor injure the effect of the whole; in India the principal form is lost in the ornaments which divide and decompose it. In Egypt, that which is essential predominates; in India you are lost in a multitude of accessories. In the Egyptian architecture, even the smallest edifices are grand; in that of India, the infinite subdivision into parts gives an air of littleness to the largest buildings. In Egypt solidity is carried to the extreme; in India, there is not the slightest appearance of it."‡ Replies to most of these objections have already been given above; but for the sake of convenience, and to show how utterly unfounded and unfair this comparison is, I shall re-capitulate some of the principal points touched upon in this chapter. Without at all subscribing to the accuracy of Mr. Ruskin's canon in which he lays down seven fundamental principles—"the seven lamps" according to his fanciful style of expression—as controlling the architect, I shall examine how far they have been attended to in Orissa. The first of his seven is "Sacrifice." It refers primarily to Biblical atonement, and secondarily to the "value of the appearance of labour upon architecture." The latter alone can concern the people of this country; and it may be unhesitatingly stated that no competent, honest judge, who has beheld the temples of Orissa, can for a moment deny that the principle has been one of the cardinal agencies which governed the action of their builders. There is no sign whatever of labour having been anywhere shirked, but ample evidence everywhere most prominent to show that the most stupendous labour has been courted with a view to manifest "the spirit which offers for (devotional) work precious things, simply because they are precious;—not as being necessary to the building, but as an offering, surrendering, and sacrifice of what is to ourselves desirable."§

The second principle is that of "Truth," or the avoidance of [illegible] deceits, that is, "the suggestion of a mode of structure or support other than the true one, or the marking of [illegible] represent some other material than that of which

* History of Art, I. p. 77.
† Ancient Art and its Remains, p. 220.
‡ Encyclopedia of Arc[illegible] 30.
§ Seven Lamps of Architecture, p. [illegible]

they actually consist," or the employment of ornaments which are calculated to produce a false impression on the beholder. No deception of any such kind has been practised by the architects of Orissan temples: all their structures openly avow what they are intended for; every member has its use; every ashlar or moulding its meaning; no terracotta moulded figures supply the place of honest hard-wrought sculpture; no painting deceives the eye into the belief that wooden panelings are variegated marble; no mark of mockery anywhere mars the beauty of truth.

Of "Power," the third lamp, by which massiveness as an element of architectural effect is indicated, enough has already been said in the preceding pages (pp. 35, 41). There certainly does not exist in the massiveness of Orissan temples that nakedness which removes the pyramids from the pale of architecture as a fine art; but it is not the less remarkable. The first impression that the sight of an Orissan temple produces is its extreme solidity. No part of its construction appears weak, or insecure, or liable to be easily injured. As the visible abode of the Sempiternal Divinity, it is expressly designed to typify, or symbolize, to man the idea of eternity, defiant alike of time and of the tremendous elemental commotions of the tropics. If its parts are subdivided, or rather diversified, it is not to subdue the spirit of power, but to temper it with beauty; and I have no reason to suspect that those Europeans, who have studied ancient Indian temples, will for a moment be disposed to side with Mr. Gwilt, and take them to be emblems of littleness. At any rate, in Indians they inspire feelings of unity, solidity, beauty, and grandeur, the very reverse of what the critic named is inclined to think.

The fourth canon is "Beauty," or the disposition of architectural ornaments in the most effective way. Of this much has already been said, and a few words more will follow. The fifth is "Life," or "the making of an edifice the exponent of living things and of the men who rear it,"—a living handiwork, bespeaking the immortal spark in the architect struggling "towards something unattained," and not the *caput mortuum* of a dead art. This yearning for advancement, to be really beneficial, should be controlled by "the Lamp of Obedience," and so it is found in Orissa. From the time of the Great Tower of Bhuvanes'vara, in the middle of the seventh century, to that of the Black Pagoda of Konárak in the beginning of the thirteenth, the laws of the Silpa S'ástra represented the Lamp of Obedience, while "the luxuriousness of perpetually varying fancy," producing endless forms of ornaments in every possible mode of combination, bore evidence to that of life. From the last-named date life ebbed rapidly, and in less than a century was entirely extinct.

Little need be said of Orissan temples as "Lamps of Memory"—*i. e.*, "as monuments of history, conservators of old ideas, and relics of the past."* Every detail on them is a living monument,—every figure—every flower—every scroll records faithfully the feelings, desires and aspirations, the joys and the sorrows, the religion, the habits of life, and the social condition of a by-gone age. They are not what Ruskin calls "the pitiful concretions of lime and clay which spring up in mildewed forwardness out of the kneaded fields about our capital—those thin, tottering, foundationless shells of splintered wood and imitated stone—those gloomy rows of formalised minuteness, alike without difference and without fellowship," but living emblems of eternity, hoaried by age, and hallowed by ten thousand associations,—pages of history in which the people of this country have read, and will read for centuries to come, lessons of a more endearing and stirring nature than can ever be acquired from the mist-encumbered folia of the bulkiest tomes. If they fail in any one point as "Lamps of Memory," it is as regards political history. They bear no representations of battles with foreign foemen, no files of prisoners led in chains to swell the pageant of a mighty conqueror, no lines of potent kings seated in regal state; no varied groups of various nationalities to indicate the different races of men with which the kings of the country came in contact, such as endow the bas-reliefs and paintings of Egypt and Persia with engrossing interest. But it should be borne in mind that the structures on which such political representations appear are palaces and tombs, *i. e.*, to use the terminology of Ruskin, "civil" and "memorial" edifices, and there they are most appropriate and becoming; whereas those which form the subjects of this work are "devotional," earthly abodes raised by weak man for the habitation of the visible emblem of Him who is without beginning and without end, before which all men are equal, and the vanity and pomp of potentates melt into insignificance. Before them the sovereigns of Orissa assumed the humble title of "sweepers," and they could not venture to portray on such holy structures their own achievements and glory as sovereigns. Had their palaces been in existence, they would probably have shown some political bas-reliefs, but they have long since been swept away by the tide of time and the innovations of political vandalism.

The "Lamp of Beauty" includes location, [illegible] decoration, symmetry, and the disposition of light and shade. On each of these heads some [illegible] have already been made in different parts of the preceding pages [illegible] 39, 28, 40 [illegible]re, however, to add a few words regarding the last three.

Decoration.

The excellence of decoration [illegible] on the choice of forms, and their disposition in harmonious union. The two

* Samson on the Elements of Art Criticism, p. 373.

conditions have to be equally respected, or the object is defeated. It would be a trite axiom to say, that unless the forms themselves be beautiful, no combination can make them so; but it is equally true that even the most beautiful objects lose their effect if not appropriately arranged. The Orissans of the seventh century paid particular attention to both these conditions. They were, as already stated (p. 67), very choice in the selection of only what are naturally beautiful for ornaments, and they tried their utmost to arrange them to the best advantage. If their attempt at arrangement has not proved quite so successful as could be wished, it is due as much to art in India not having attained to that pitch of excellence with which European critics are too apt to compare it, as to national habits and local prejudices; for it must be borne in mind that, what is reckoned a most happy disposition according to one nation, does often appear incongruous and offensive to another. An apt illustration of this remark occurs in the "Seven Lamps of Architecture." Adverting to the disposition of garlands, Mr. Ruskin observes: "A garland is meant to be seen upon a head. There it is beautiful because we suppose it newly gathered and joyfully worn. But it is not meant to be hung on a wall."* This may be true of England, and perhaps also of modern Europe generally; but in India, where the universal practice is to wear garlands round the neck and not round the head, such a canon of taste cannot but be laughed at as absurd and ridiculous. It is usual here also to decorate houses, on festive occasions, with chaplets of leaves and flowers hung all over the walls, and accordingly Indian artists have everywhere ornamented the necks of pillars, and the surfaces of walls with carved ornaments of the kind, and the effect instead of being incongruous and offensive, is positively beautiful. The festoons on the Corinthian frieze are also most agreeable and pleasing. Ideas of caricature and grotesque also differ in different nationalities, and when they are brought to bear on ornamentation, diversities are produced, which, though not universally appreciable, are still not on that ground faulty. In such cases all that can be demanded is harmony, and this, I venture to think, is not wanting in Orissan temples.

Respective Symmetry.

Symmetry may be treated under three different heads: 1*st.*—*Proportion*, or the adaptation of the dimensions of the several parts of a thing to each other. 2*nd.*—*Respective Symmetry*, or such disposition of parts as to make the opposite sides equal to each other. 3*rd.*—*Uniform Symmetry*, or that disposition of parts in which the same ordonnance reigns throughout the whole. Regarding the first, some remarks have already been made at the beginning of the second chapter. The second, at first sight, may appear to be an unnatural formality, and therefore not an essential element of beauty. Nature does not arrange a landscape by two exactly similar halves, producing the same thing twice over; why should then man do so in building a house? The argument, however, is fallacious. In a beautiful landscape there *is* a balancing of its different parts so as to secure a considerable amount of symmetry, and artists study it carefully in grouping their subjects on canvas. A landscape, however, is not a single entity, but a collection of many objects; and for the purposes of comparison with a house or other art creation, it is necessary that individual objects of nature should be selected, and not collections. If this be done it will be found that nature is particularly mindful of respective symmetry in the formation of animated beings. With the exception of some of the lowest forms of organization, every animal is externally a compound of two symmetrical halves. Those halves may be so artfully united at the mesian line as to produce one individual, whose double character does not become manifest until after careful study, still the double character is nowhere wanting; and what is more, the beauty of the form is in a great measure dependent upon it. Take away an eye or an arm from the finest figure, and its beauty is at once destroyed; even the alteration by a hair's breadth of one side of the most exquisitely shaped mouth will induce an amount of deformity not easy to be defined. And what is true as regards the human form, is equally so in works of art, for imitation of nature forms the cardinal principle of beauty in art, and she advances towards perfection the more closely she copies nature: to quote William Hazlitt: "the highest art is the imitation of the finest nature, or, in other words, of that which conveys the strongest sense of pleasure or power, of the sublime or beautiful."† Doubtless in architecture, where the proportions are large, very slight differences are not so easily perceptible as in small objects, but the principle is not thereby in the least affected. In Greek architecture this attempt to copy nature by adhering closely to the laws of respective symmetry is most prominent. All its nobler specimens, if cut longitudinally along the middle from their fronts, would invariably produce two exactly similar halves. The same is the case in Orissa, and there is not a single exception. The front is a combination of two halves reduced to unity by the intervention of the door and the coat of arms, or the dripstone moulding, over it, even as the human form is united by the nose and the mouth; and the two sides are exact counterparts of each other. The sameness induced by this a[illegible] is never obtrusive nor offensive, as the two sides can never be seen in the same light at the same instant: stand [illegible] will, [illegible] behold only one or two sides, or one full side and small portions of two other sides, together scarcely equal to [illegible] sides, and those in such different

* Seven Lamps of Architecture, p. 105.

† Criticisms on Art, p. 257.

lights, that they never produce two identically same pictures, while the sense of beauty produced by them is infinitely greater than any diversity in the forms of the sides could possibly produce. Indeed, if one were to conceive in his mind a peripteral temple with the columns of its left side different from those of its right, and feel the aesthetic effect of the arrangement, he will find no difficulty in appreciating the beauty of symmetry which results from the similitude of the two sides of a house. This symmetry has been marred in many Orissan examples by subsequent additions even as in Greek edifices, but the original conception of the building nowhere tolerated any departure from perfect symmetry.

Uniform Symmetry.

Another principle of art in which repetition of the same forms and ornaments, instead of marring, or cloying, the sense of beauty, enhances it, is *uniform symmetry*, or that disposition of parts in which the same ordonnance reigns throughout the whole. Whatever the number of columns required in a building, it must be made up of structures of the same size and shape, and they must be arranged in the same style, and at uniform distances with almost mathematical precision; no deviation being any where permitted, and the smallest change being reckoned prejudicial to beauty and taste. This is the fundamental law on which orders in architecture are founded, and it was most rigorously enforced by the Greeks. Indeed, the relative proportions of the several members of each Greek order are such, that it is impossible to mix any important member of one order with another without causing a frightful amount of deformity. In the absence of information regarding the different orders of architecture which prevailed in India in ancient times, and it being even questionable whether there were more than one order current, it is impossible to say how far there were restrictions in the way of employing ornaments promiscuously; but as regards particular classes of buildings the rule of uniform symmetry was strictly observed. The roof appropriate to a porch was never put on a dancing hall, nor the mural decorations of the latter ever transferred to the former. The system of projections so peculiar to the square chamber of the temple and its porch could not be assimilated to the light, open, oblong dancing hall without altering its character, nor could the refectory be placed in immediate proximity to the temple to serve the purposes of a porch without destroying the symmetry of both. In short, each class of building has its peculiar character, peculiar disposition, and peculiar ornaments, and these have been assigned to their respective uses with scrupulous care. Further, when out of a number of various decorations, a particular one has been selected, such as the typical pilaster with ophidian mermaids, it has been repeated as often as necessary, but never coupled with another of a different style. There are instances in which a whole façade is not made up of the same kind of pilaster throughout, but of two or more kinds; but in such cases the grouping is peculiarly ingenious and artistic, and by the repetition of the same arrangement on the opposite sides, respective symmetry and harmony have been very happily preserved. All this is doubtless entirely arbitrary and fictitious; but, as justly observed by DeQuincy, "in every art there must be, with respect to truth, some fiction, and with respect to resemblance, something incomplete,"* and in regard to such a technical art as architecture, the more fact of such rules having been laid down and imperatively enforced, implies a highly advanced intellectual condition of the architects.

Light and Shade.

Casual references have already been made to the plan adopted by Orissan artists of diversifying their walls by frequent projections with bevelled corners, and repeated chamfering, or splaying, and other devices, so as to produce varied contrasts of light and shade, and thereby secure the highest amount of picturesque effect compatible with a monochrome ground. This is a characteristic which, I believe, is peculiar to this country. The Grecians effected this object by their magnificent columns placed on high terraces, so as to set the whole structure in bold relief against their clear blue sky. The Romans attempted to secure it by introducing engaged pillars, which, however, though effectual in covering the nakedness of flat walls, were not sufficient to cast such strong shadows as to secure much relief. The Saracens failed completely in this respect. Their walls are the repositories of panelings innumerable, but nothing high enough to cast a strong shadow. In Orissa, on the other hand, the elevations and depressions of the surface are so bold and varied, that there are marked differences of light and shade, and yet they are so artistically and harmoniously united as to produce the most charming effect. On the surfaces of the walls, the elevations, as already stated (p. 41), are produced by buttress-like projections with chamfered corners, and the depressions by niches; on pillars and pilasters by contractions and bands supplemented by chamfering and other devices; and on mouldings and ornaments by an intricate system of stops, scooping, and carving, which changes the light into a variety of shades. On rounded forms the beauty-like sigmoid scroll is a common device. It is sometimes carved into foliage, but ordinarily left bare. It is very pleasing. It cuts the figure into two, and, by casting a strong dark line of shadow, brings out the to perfection. On flat bands and mouldings oblong tablets are frequently used,

* An Essay on the Nature, the End, and the Means of Imitation in the Fine Arts, p. 113.

which break their continuity, and effect an agreeable diversity. But the most generally adopted device is the *Rāmarekhā* already noticed. Its use as a crest, though extensive, is secondary, compared to the part it plays in regulating the fall of light on mouldings, bands and fascias (p. 47). Mr. H. H. Locke of the Government School of Art, Calcutta, speaks in terms of great praise of this class of stops; and as he has made a more thorough and scientific study of Orissan architecture than any other European artist or antiquarian, and can, from his perfect familiarity with, and professional knowledge of, European art, speak on the subject with much authority, I avail myself of his permission to quote here a passage from a private letter of his to my address. He says: "These points are so many *stops* in the line of light and shade; sometimes the pause is that of a light point amid shadow, sometimes it is a dark point upon a belt of light; in both these phases the feature is extremely characteristic of the architecture you are writing about, and shews clearly how well the Orissan builders understood the value of a sharp line of cast shadow across a varied surface. Place a rod in front of a long suit of mouldings and see how the cast-shadow of the stick, in winding and turning in and out of round and hollow, projection and depression, 'brings out' the profile or contour of the different surfaces, and the more direct the sun's rays fall on them, destroying the local surface-shades, the stronger will be the effect of the cast-shadow. The Hindus, I am safe in saying, felt this thoroughly, and never allowed a long suit of mouldings to run the risk of appearing tame and uniform from loss of light and shade; these 'stops,' as I have called them, are always brought in every here and there giving sharp cast-shadows which develope the forms of the moulded surfaces in a most effective and agreeable way. There seems in fact to have been a perfect thirst for light and shade—crisp, broken light and shade—and these stops are so many 'traps,' not 'to catch sun-beams,' but to catch form-explaining shadows. Even in the bases of piers and pilasters, where the horizontal run of the mouldings barely exceeds a couple of feet, there is still the stop which gives you a vertical 'contouring' midway, and the effect of the mouldings thus tied together by narrow strips left in the original surface-plane is, to my mind, charming in the extreme."

Note to line 23, p. 69. The Statue of Silènos is placed in so bad a light in the Museum of the Asiatic Society, that I could not, when I first examined it, correctly ascertain the character of the object which has been described as a lotá or cantharus in front of the principal figure in the obverse. The object represented is the forepart of a lion issuing from a cave and not a lotá. On the strength of this the Hindus might claim the group to represent Śiva, his wife Durgá, his two sons Kārtikeya, and Ganeśa, and his demon attendant Nandi. But the beard, so uncommon in images of Śiva, and the Greek feeling and character of the grouping, are opposed to the claim.

Note to line 45, p. 43. The Apollo and Daphne of Bernini seems to be an imitation of an antique group of Bacchus and Ampelus found at La Storta, about eight miles from Rome, and now in the British Museum. It represents Ampelus at the period of his transformation into the vine plant, but before the metamorphosis has been quite completed. "The lower part of his body appears to have taken root, while the transformation, which is gradually proceeding, has not yet deprived Ampelus of the power of looking up affectionately at his master, to whom he is offering grapes. The skill of the sculptor has blended together the animal and vegetable forms with so much ingenuity that it is difficult to decide either where the one begins, or the other terminates." Engravings from the Ancient Marbles in the British Museum, Part III. Plate XI.

CHAPTER IV.

Sculptural Indications of the Social Condition of the Temple Builders.—Sculptured materials for a social history of India; Sánchi gateways; Amarávati rails; Bhuvanes'vara temples. Similarity of their historical indications deducible from the nature and character of Indian languages and religious systems. Importance of dress in civilization. Evidence of the Rig Veda as to clothing; material thereof, wool and cotton. Testimony of the Bible. Silk; proofs in the Rámáyana. Manu on woollen and hempen thread. Arrian's muslins. Specimens of ornamented cloth from sculptures. Dyed cloth. Style of dress. Vedic evidence thereof; sculptural ditto. Ordinary every-day Uriyá male dress; full dress. Ancient Hindu male dress. Uriyá female dress. Evidence of sculptured dress insufficient to settle questions of Indian ethnology. Mr. Fergusson's Dasyus; their relations to the Vánaprasthas. Head dress; coiffure; caps; turbans. Beard. Shoes, boots. Personal ornaments; Vedic evidence; that of Amarávati; ditto of Bhuvanes'vara. Indian filigree. Crowns, coronets, and tiaras. Ear ornaments. Nose ornaments. Necklaces. Waist ornaments. Leg ditto. Material of ditto. Precious stones. Furniture; bedsteads, bedding, footstools, chairs, folding stools, teapoys, thrones, tables. Mode of sitting. Umbrella. Chámara. Fans. Domestic utensils. Drinking cups; water carafts; goblets; spittoons; betel boxes; courier bags; leather bottles; dressing cases. Musical Instruments. Boats. Food and drink. Offensive arms,—bows, arrows, swords, lances, discuses, lasso. Defensive arms,—shields, armour. Flags. Trumpets. Horse Harness. Whips. Chariots. Wagons.

BEARING in mind the marked success which has attended the labours of Sir Gardner Wilkinson in developing the history of Egypt from her ancient monuments, it is to be hoped that a time will come when it will be possible to deduce a similar social history of India for, at least, a considerable period of her antiquity. Materials for such a work are not altogether wanting. If, owing to the nature of the climate and other causes, there is now in India nothing like the endless series of old paintings which delineate almost every phase of Egyptian life,* or the historical bas-reliefs which record with fastidious exactitude the lives of Assyrian Kings, their wars and hunting scenes, their state ceremonies and religious festivals, their servants and soldiers, their tributaries and captives, there are nevertheless a vast number of sculptures which serve to a great extent the same purpose. The Sánchi gateways contain representations of several thousands of human figures engaged in various occupations of life, and they date from an early period, certainly not later than the first century of the Christian era. Three centuries subsequently there is in the topes of Amarávati,† in Guntoor, another and a most interesting collection. Adverting to the rail round this monument, Mr. Fergusson observes: "There were apparently twenty-four pillars in each quadrant, and eight at least in each gateway, say one hundred and twelve to one hundred and twenty in all. This involves two hundred and thirty to two hundred and forty central discs, all of which were sculptured; and as each of these contains from twenty to thirty figures at least, there must have been in them alone from six thousand to seven thousand figures. If we add to these the continuous frieze above, and the sculptures above and below, and the discs on the pillars, there probably were not less than one hundred and twenty to one hundred and forty figures for each intercolumniation, say twelve thousand to fourteen thousand in all. The inner rail contains probably even a greater number of figures than this; but they are so small as more to resemble ivory carving; but except perhaps, the great frieze at Nakhon vat (in Kambodia), there is not, perhaps, even in India, and certainly not in any other part of the world, a storied page of sculpture equal in extent to what this must have been when complete."‡ Most of these pillars and discs have no doubt already disappeared, but still enough remains amply to reward the diligent enquirer. Even a careful study of the valuable plates published in Mr. Fergusson's magnificent work would afford by no means a small amount of information to the student of history.

Extent of Bhuvanes'vara sculptures.

The total amount of sculptured work on the temples of Bhuvanes'vara is probably greater than what is to be met with in Sánchi or Amarávatí; but it is more ornamental than historical. The bulk is made up of mouldings, scrolls, floral devices, and animals, and the number of human figures to be seen is limited to perhaps two or three thousand. Most of these figures, besides, are placed singly in conventional attitudes, and

* The frescoes of the Ajanta caves still existing were at one time plentiful in India.

† Mr. Fergusson spells the word "Amrávati," lit. having mangoe trees; but, as he admits that it is derived from *Amares'vara*, the lord, *Is'vara*, of the immortals, *amara*, the correct orthography should be as given above. To avoid a discussion for which I have no space here, I have accepted Mr. Fergusson's dates of Sánchi and Amarávatí; but there are reasons to believe that the principal topes of those places date from a much earlier period.

‡ Tree and Serpent Worship, p. 166.

do not yield the same amount of information which [illegible]ried groups are calculated to afford. Many of them again are repetitions, and others represent scenes, such as eating and drin[illegible]g, playing and love-making, which are common to humanity in every part of the world. There are, nevertheless, several g[illegible] of great interest, and even the single figures are not entirely useless as indicia of manners, customs, habits, and ide[illegible]ir time. Had these three collections belonged to the same province, and been the handiworks of the same race of [illegible]ring in mind the strong vitality of custom in this country, one could have taken the Sánchi gateways of the first century, the Am[illegible]vatí rails of the fourth, and the Bhuvanes'vara sculptures of the seventh century, as three consecutive chapters of a single history. Such is, however, not the case. They are entirely separated from each other by distance, by nationality, and, in one case, by religion, and the picture of domestic and social life they represent, cannot be strictly faithful of the whole of India. Nevertheless, their indications and suggestions must be applicable, of course with some reservations, to most parts of the country. The civilization of the Aryans, there are irrefragable evidences to show, had spread over nearly the whole of India long before the time when the sc[illegible]tures under notice were designed, and it would be unreasonable to suppose that social life and art had been left in each province to f[illegible]w their own individual course, utterly unaffected by it. Two states of civilization can no more remain in contact for any lengt[illegible] of time without influencing each other, than two opposing forces can meet without a counteraction. The languages and the religious systems of the different races of India, bear the most unmistakable evidence of this law, and it may be fairly assumed that it is to be equally met with in domestic and social life. It has been already shewn that architectural details and ornamentation have been very much alike in all parts of India, and the general style of sculpture, making due allowance for differences of material, age and capacity, is likewise the same. The inference, therefore, that the civilization they delineate as regards dress, ornaments, household furniture and utensils, arms, musical instruments, and social life, was, within certain limits, similar, cannot be open to any serious objection. It would be foreign to the subject of this work to enter at length into a disquisition on the state of civilization in ancient India, but a few remarks bearing upon the evidence of the sculptures that have been met with, will perhaps not be quite out of place.

Importance of dress.

The first step in the march from barbarism to civilization is indicated by the dress of a nation. Climatic and other causes, no doubt, influence the nature of dress; but no race can be said to have emerged from the grossest barbarism, or the most primitive simplicity, which has not risen to something more substantial, ample and artificial than the wardrobe of mother Eve. The skins of animals have supplied the place of cloth to wild races at all times; but it is only after those nations learn to convert them into leather that they can be said to have reached the outskirts of a civilized life. The Hindus seem to have made considerable progress in this respect at a very early period in their history. The Sañhitá of the Rig Veda, which dates with the Mosaic chronicles, contain many passages which show that even then they were perfectly familiar with the art of weaving not only for the necessaries, but also for the luxuries, of life. The passages, it must be confessed, are brief and casual, occurring mostly by way of similes and comparisons in hymns designed for the glorification of particular divinities; but they are not the less interesting and suggestive on that account. Thus the verse which describes night as "enwrapping the extended world like a woman weaving a garment,"* gives only a simile, yet that simile refers to a familiar fact whose existence cannot be questioned. In the same way a hymn to the Ápris makes "night and day interweave, in concert, like two famous female weavers, the extended thread to complete the web of the sacrifice."† Elsewhere we read of the fathers, who "wove and placed the warp and the woof." (X. 30). "Ushá (dawn) is a goddess, in person manifest like a maiden, who goes to the resplendent and munificent sun, and, like a youthful bride before her husband, uncovereth, smiling, her bosom in his presence."‡ Elsewhere she, "like a wife desirous to please her husband, puts on becoming attire, and smiling as it were, displays her charms."§ Again, "exhibiting her person like a well-attired female, she stands before our eyes, gracefully inclining like a woman who has been bathing."‖ "Ushás, the daughter of heaven, tending to the West, puts forth her beauty like a well-dressed woman." In other places she is frequently represented as "clothed with radiance." The idea is repeated in connexion with the altar, which in one place is described as decorated in the same way, "as a wife attached to her husband puts on elegant garments to gratify him."¶ In a subsequent hymn, "the vast offspring of the firmament, the seven eternal ever youthful rivers" of the Vedic age are said to be "not clothed, yet not naked."* In the remarkable hymn, in which Trita prays to be released from his confinement in a well, he says, "the ribs (of the well) close round me, like the rival wives (of one husband); cares consume me, S'atakratu, although thy worshipper, as a rat (gnaws a weaver's) thread[illegible] and the scholiast finds in this, not altogether

* Wilson's Rig Veda II., p. 307.
† Ibid. II., p. 218.
‡ Ibid. II., p. 9.
§ Ibid. II., p. 12.
‖ Ibid. III., p. 369.
¶ Ibid. III., 122.
* Ibid. II., 320.
† Ibid. I., 271.

without reason, a reference to the practice well known in the time of Manu (VIII. 397) of sizing threads with rice water, for the purpose of weaving, and which made them palatable to rats. The whole passage, however, admits of a different interpretation. In a hymn to Indra praises and hymns are compared to "elegant well-made garments" (*Vastrevabhadra sukrita*), as being fit to be received as a respectful present"* (*Upa[illegible]vadgrâhyâni*). Commenting on this passage, Wilson says, "If the rendering be correct this shows the custom of presenting honorary dresses to be of Indian origin, and of considerable antiquity." Among largesses given to priests by Divodása, the idea of a *Khilat* again recurs: thus the priest says, "I have received from Divodasa ten horses, ten mares, ten clothes (Khilats of ten parchas?), and ample food." As'watha gave to Payu "ten lumps of gold, ten well-appointed chariots, a hundred head of cattle."† Gifts of "elegantly adorned and well-dressed female slaves" are recorded in a subsequent book. The Yajur and the Sáma Vedas, likewise, contain many references of the same kind to cloth, and in one place in the former "gold cloth," or brocade, for a counterpane is distinctly mentioned;‡ but as those works are to a certain extent of comparatively later date, it is not necessary to load these pages with quotations from them.

Wool and cotton.

No information is available in the Rig Veda regarding the material of which the clothing, it so often alludes to, was made. Cotton is nowhere mentioned. Rams and ewes are described among domestic animals,§ but they are not said to be the sources of cloth. It is nevertheless probable that both cotton and wool were the substances which were used in its manufacture; for the term "weaving," which is occasionally used, could not have originated and got currency in the Vedic language, without the existence of some material adapted and in common use for weaving. "It is difficult to conceive," says Dr. Muir, "that cotton (which, as we learn from Professor J. H. Balfour, is supposed to have been indigenous in India), though not mentioned in the hymns, should have been unknown when they were composed, or not employed for weaving the light cloth which is necessary in so warm a climate."‖ This argument would apply equally to woollen stuffs in many parts of the Punjab, the earliest Aryan seats in India, where the cold for some months in the year must have necessitated a much warmer covering than cotton cloth. In the Old Testament there are references which show that the ancient Indians did produce enough of woven texture to be able to export a portion for the use of foreign nations.¶ "That the coloured cloth and rich apparel brought to Tyre and Babylon from distant countries, were partly of Indian manufacture will scarcely be doubted," says Heeren, "after what has been already said of the extent of the Phœnician and Babylonian commerce."*

Silk.

The case is different as regards silk. It is a substance which could have scarcely escaped notice had it been known at the time of the Vedas; but no mention of it has yet been met with. Pánini, however, has not only given words for wool, cotton, weaving, cloth, turbans, sewing, &c., all which were, at his time, perfectly familiar, but also for silk for which he gives a special rule.† In the time of the Rámáyana silken, woollen, and cotton stuffs of various kinds were abundant, and in extensive use. According to Válmíki the splendid trousseau of Sítá consisted of "woollen stuffs, furs, precious stones, fine silk, vestments of divers colours, princely ornaments, and sumptuous carriages of every kind."‡ The woollen stuff here adverted to, has been supposed by Heeren to have been shawls, for at a time when coarse woollen cloths were used to cover wagons, as was the case in the days of the Rámáyana, nothing short of the productions of the looms of Cashmir, the finest and most precious of woollen fabrics, would have been suitable for presentation to a princess; but the commentator Rámánuja believes it to have been a stuff from Nepal. That the "fine silk" was a manufactured article is evident from the frequent allusion in the work to silk vestments of various kinds, worn, not only by queens and princesses, but also by other persons of quality. When Ráma and his brothers arrived at the capital from Mithilá with their new-married brides, Kausalyá, Sumitrá, the fair Kaikeyí, and the rest of the royal zenána, "eager to embrace their beauteous daughters, received the happy Sítá, the fair famed Urmilá, and the two daughters of Kus'adhvaja, all sumptuously dressed in silk, and entertaining each other with agreeable conversation, hastened to the temples of the gods to offer incense."§ Elsewhere we read—

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* Wilson's Rig Veda, III., 277.

† Ibid. III., 474.

‡ Taittiriya Bráhmana, III., 075.

§ "Who bestows easily-obtained happiness on our steeds, our cows, our rams, our ewes, our men, our women, our cows?" Wilson's Rig Veda, II., p. 111.

‖ Sanskrit Texts, V., 462.

¶ Ezekiel xxvii., 24.

* Heeren's Historical Researches, III., p. 303.

† कोशाद्दश्म । ४ । ३ । १७ । काशवस्त्रादिभ्यश्च यत्नः ।

‡ अथ राजा विदर्भाणां ददौ कन्याः शुभा बहूः ।
मणिकाञ्चनमुख्यानि वस्त्राणि विविधानि च ॥ ३ ॥
कम्बलानाञ्च मुख्यानां क्षौमाणां कोशजानि च ।
दुकूलरत्नयानानि दिव्यानि सुबहूनि च ॥ ४ ॥
Rámáyana, B. I. Canto 74.

§ केकया च सुमित्रा च कौसल्या च सुमध्यमा ।
बभूवुस्तिसृषु पुत्रा वधूस्ताः राजयोषितः ॥ ७ ॥

"Go quickly hence and with you bear
Fine silken vestures, rich and rare,
And gems and many a precious thing
As gifts to Bharat and the king."*

At the time the Laws of Manu were codified, the profession of weaving in woollen stuffs had so far fallen in repute that it was prohibited to the Bráhmans (X. 87), and the use of such stuffs was assigned to the third class of students in theology; the first and second wearing antelope-skin and woven hemp, (II. 41). The sacrificial strings in the same way were required to be made of cotton, hemp, and wool, for the three classes respectively (II. 44).

Various places where stuffs were manufactured.

The Rámáyana does not give us any clue to the different places which were noted for the manufacture of particular articles of clothing; but some hints are available on this subject in the Mahábhárata. In the Sabhá Parva of that work, the poet enumerates the several presents which princes and potentates from various parts of India, brought to the presence of Yudhishthira, and among them are mentioned clothes and skins, the former made of wool and embroidered with gold, being in fact shawls and brocades; the latter, "the skins of animals that live in holes and wild cats, intending probably furs of varieties of the martin and weasel families," brought by the Kambojas or people of the Hindu Kush; "blankets of various manufacture" by the Abhíras of Guzerat; clothes of diverse kinds not made of cotton, but of the wool of sheep and goat, or of thread spun by worms (silk ?), or of *patta* vegetable fibres or hemp linen, or made by machinery (woven ?) by the Scythians, Tukháras and Kankas; housings for elephants, by princes of the Eastern tribes, lower Bengal, Midnapur and Ganjam; and fine linen (? muslin), by the people of Carnatic and Mysore."† After a careful study of this passage, Professor Wilson is of opinion that "silk, both raw and manufactured, was no doubt an article of import from China into India at a very early date."‡ In the first century before Christ, king Súdraka makes the buffoon of his play, the *Mrichchhakatika*, enquire about the brother of a courtezan:

"Who is that gentleman dressed in silken raiment, glittering with rich ornaments, and rolling about as if his limbs were out of joint?" (Act IV. Sc. II.)

The mother of the Asposia appears arrayed in "flowered muslin" with her "well-oiled feet thrust into slippers."

In the time of Alexander's invasion, the Greeks were particularly struck with the extraordinary whiteness of Indian clothing, and did not fail to notice with great curiosity, as Herodotus and others had done before them in Egypt, that they were manufactured with the "tree wool," or "wool produced in nuts." Shortly after, Arrian, in the Periplus to the Erythrian Sea, noticed several kinds of cotton fabrics, both thin and thick. He names three principal sorts:—

1*st*.—Ἰνδικὰ τὰ πλατύτερα ἢ λεγόμενα Μονάχη. Wide Indian muslins called Monakhè.

2*nd*.—Σαγματογήϊνα. Muslins in single pieces.

3*rd*.—Χονδρά. Coarse muslins.

He has also a coarse cotton fabric of the colour of the mallow of the name of Μολόχινα, a fine muslin (? linen) of the name of Σάκκος, and other muslins of the name of καρπάσινα. His Σινδόνες αἱ διαφανέσταται Γαγγητικαὶ, it is evident, was also a variety of the finest Bengal muslin.§

Cloth in sculpture.

It is not to be expected that ancient sculpture should afford us any valuable information regarding this branch of our enquiry. The material and quality of woven texture can be but ill-represented in marble, and in such rough stones as the sculptors of India ordinarily had at their disposal, nothing of the kind was practicable. Nevertheless they are not altogether silent on the subject. In the two principal statues in the great temple of Bhuvaneswar, which are made of a superior kind of chlorite, and placed in deep recesses, completely protected from the sun and rain, the artist has attempted to produce a vestment of rich brocade, proving that fabrics of that description were then, as they are now, highly prized articles of luxury, familiar with the people. A specimen of this cloth is represented in Illustration No. 68. A glance at it will show that in neatness, elegance, and richness of design and execution, it is in no way inferior to the finest production of the Benares loom of the present day. In the temple of Baital Devi, or "the boat-shaped temple," several figures of dancing girls are dressed in clothes of variegated patterns, and one

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सभां गौरीं गौरशिखामुल्कीकाञ्च यशस्विनीं।
कुरुध्वमद्य चैव परिस्पन्दानुमञ्च च ॥ ९ ॥
सभः परेशरायाश्च चैत्यं वृक्षञ्च पूजितं।
सङ्घातमभितो गोभिः शोभयाथ च ॥ १० ॥
उपस्थितञ्च तां दत्त्वा देवतायतनान्यपि।
अभिवादाभिवादांश्च पूजान पूर्वमथा ॥ ११ ॥

Gorresio's Rámáyana, I. p. 207.

* Griffith's Rámáyana, II., p. 270.

† Wilson, Journal Rl. As. Soc. VII. 130.

‡ Royle, on the Productive Resources of India, p. 117.

§ Vincent's *Periplus*, Appendix vol. I., pp. 40, 41, vol. II. pp. 18, 20, 58, 66, 76.

in a *pâyjâmâ* or drawers, of diagonal stripes enclosing designs of spots, and zigzag lines. (Illustration No. 67.) A male figure in the same temple, has a pair of short-drawers of a similar kind of cloth, the stripes being relieved by spots only. (Illustration No. 68.) A petticoat of a female figure has the stripes, but no spots, sprigs, or other design. (Illustration No. 69.) On some of the statuettes in Lakshmí's Temple there are also clothings of different designs, one of which with single stripes is shewn in Illustration No. 70. On a female figure, playing with a child, brought from Bhubaneswara, and now in the Museum of the Asiatic Society of Bengal (No. 805), a double-striped pattern with wavy lines is distinctly seen, (Illustration No. 71.) On another figure (No. 808), the ground between the wavy horizontal stripes is relieved with detached flowers of two kinds, and the border is elaborately wrought, (Illustration No. 72), and the attendant of this figure has cloth with stripes, but no flowers. Illustrations Nos. 73 and 74 exhibit clothes of the same kind, but the flowers are of different patterns. In the group of Jinas in the Asiatic Society's Museum, which, as already shewn, is of Indian origin, and dates, at least, from the beginning of the Christian era, there is a male figure dressed in a *chaphan*, the cloth of which is a kind of flowered muslin, having sprigs all over the ground. (Illustration No. 75.) On another piece of sculpture in the same collection, brought from Behar, and, from the character of the inscription on it, apparently of the eighth or ninth century, there is a representation of a kind of cloth with diagonal stripes relieved by flowers of two patterns. A Buddhist rail post from Buddha Gayá, also in the same collection, shows cloth of a check pattern. (Illustration No. 88.) The selvage of cloth is represented on many figures, and coloured borders on others. The fineness and transparency of scarfs are sometimes attempted to be shown, but the attempt has not been successful, and what appears now to be the success of art is probably due to inefficiency in representing the folds of the costumes.

Dying of cloth.

Early Indian literature is silent with respect to the different colours used in dyeing textile fabrics in ancient times. But the great abundance of vegetable dyes in India could not but have attracted the notice of such an intelligent race as the early Aryan settlers were, and looking to the frequent mention of dye stuffs by Manu and other lawgivers, it is to be presumed that they were extensively used by the people in colouring their clothing. The rude aborigines, such as the Bheels and Gonds, likewise availed themselves of the supply, and probably coloured their scant clothing and ornamental feathers and fibres to as large an extent as in the present day. Mention is frequently made of Aryan women staining the soles of their feet, and the palms of their hands, with a bright crimson dye extracted from sapan wood, and the practice of using colours for beautifying the face was not uncommon. In astrological works black clothing is said to be appropriate to the planet Saturn, yellow to Venus, and red to Mars, and the six-steeped awning of Parikshita is described to have been of a black colour. Krishna and other gods had, likewise, particular favorite colours for their dresses, and Indian poetry is eloquent on the charming effect of fair women dressed in blue cloth, which is often compared to a dark cloud relieved by the lightning flashes of beauty. No rules, however, appear to have been laid down for the use of distinctive colours by householders; and with the solitary exception of hermits, who were required to wear an ochre-coloured vestment, each individual was left perfectly free in the choice of colours for his dress. Indeed, in this respect the Indian Aryans differed entirely from the Egyptians, and also from the ancient Irish, who had particular colours fixed to distinguish the rank and caste of every order of society. In Ireland King Eochaidh, it is said, first laid down the law, in the year of the world 3664, regarding colours to mark the different ranks of the people, and thence obtained the surname of Eadghadhach. His law required "one colour in the clothes of slaves; two in the clothes of soldiers; three in the clothes of goodly heroes, or young lords of territories; six in the clothes of ollavs (professors); seven in the clothes of kings and queens."* The Egyptian rule, if not so strict, was still well-defined, and among the Romans, the Tyrian purple, as is well known, was exclusively reserved for emperors. The Chinese are also particular in this respect. But in India no colour, or combination of colours, seems to have been forbidden to any one class or individual from the highest to the lowest.† In the total absence of old paintings, it is, however, impossible to obtain any evidence on the subject from ancient remains.

Style of dress.

The Vedas afford no information regarding the form and shape of the Hindu dress. Probably, the majority of the people did then, as they do now, wear scarfs or plaid-like articles (*dhuti*) completed in the loom for immediate use, keeping them in position by twisting and tucking round the waist,—"a form of dress than which," according to Col. Meadows Taylor, "anything more convenient to walk, to sit, or to be in, it would be impossible to invent."† The companions of Alexander noticed the same style of dressing nearly two and twenty centuries ago, and the costume of the masses at the present time differs in no respect from what the Greek writers indicated in their descriptions. But the question may be fairly asked, were kings, princes, and chieftains, the nobles and men of quality of

* Clonmacnoise Annalists, O'Donovan's translation. Irish Catalogue of Antiquities in the Royal Irish Academy I. 297.

† Edinburgh Review for July, 1867.

former times content with the simple *dhuti*, and did they not differ in any respect from the people at large in their habiliments? Such a state of uniformity in dress is unknown even among the rudest community, and would be altogether improbable among a race who first established the system of castes. Nor is evidence wanting, circumstantial though it be, to show that a very different state of things existed among the Indian Aryans in early times. The mention of the needle and sewing in the Saṁhitá of the Rig Veda,* cannot but suggest that even at that early period, made dresses, or such as had been prepared with the aid of scissors and needle, were not unknown. The word used is *súchi*, the same which is used to this day to indicate a needle, and it is not likely therefore, that the word then meant only a thorn or other small pointed object. The existence of such words as needle (*súchi*) and sewing (*siwan*) in the Vedic language cannot be accounted for, except on the supposition that the people who used them, knew and had what they meant. It may also be argued that it is very unlikely that the heroes of the Vedic times, who were able to forge and were in the habit of using armour and mail coats, never came to the idea of fashioning their clothes into made dresses.

Sewed dress in Sculpture.

The sculptures of Sánchi, Amarávatí, and Orissa, leave no doubt on the subject. Though, owing to causes to be presently noticed, the bulk of the human figures they represent are nude, or very scantily clothed, still there are some which bear unmistakable evidence of the existence of made dresses. Among the Sánchi bas-reliefs there are several figures dressed in tunics which could never have been made without the aid of needles. The tunics of the two archers on plate XLIII. Fig. 3, of Mr. Fergusson's work are particularly remarkable, inasmuch as the *chapkans* there shown, are unmistakable. (Illustration No. 93.) Plates XXVIII. Fig. 1, XXXIV. Fig. 2, XXXVI. Fig. 2 and XXXVIII. Fig. 1, are also worthy of notice as affording unquestionable evidences of the use of made dresses. A flag-bearer on an elephant has a dress, the sleeves of which are distinctly shewn. (Plate XL. Fig. 2.) On a Buddhist rail-post from Buddha Gayá, which probably dates from a time earlier than the Sánchi rail, there are two figures fully dressed from the neck to the middle of the leg, in a garment which appears strongly like the *jámá* of the present day. (Illustration No. 88.) Turning from them to Amarávatí, the reader will find, among an endless host of nudes and seminudes, figures, the shape of whose habiliments is unmistakably due to the tailor's art. (Plates LXVI and LXXXIV. Fig. 2.) The figures of Buddha and of priests are also everywhere clothed in a decent attire from the neck to the feet, though in their case the habit seems to be formed of loose plaids thrown lightly over the person, and not needle-made. The sculptures of Orissa offer even more positive proofs. In the Queen's palace (*Ránínaur*) among the rock-cut caves of Udayagiri, there is a statue, four feet six inches in height, cut out of the solid rock, which is dressed in a close-fitting tunic or *chapkan*, with the skirts hanging down four inches below the knee, and having sleeves down to the wrist. According to Rev. T. Acland,‡ over the *chapkan*, there was "a short shirt of scale armour," the sleeves of which reached the elbow. This, however, is not now visible. A light scarf passes round the waist and over the forearms, the ends floating in the air, exactly in the way in which the Hindus throw the scarf on their persons in the present day. A girdle or *kamarband* round the waist holds, on the left side, a short sword. The head is partially mutilated, but there are traces on it of a twisted turban. The legs and the feet are enclosed in thick, high boots or buskins. The figure has suffered by long exposure to rain and sun, but enough is preserved in the illustration No. 94 to show that the coat of the figure is made unmistakably of sewed cloth. If the arguments regarding the age of the Udayagiri caves elsewhere adduced, be sustainable, the figure is over two and twenty centuries old, and at that period, the Buddhists evidently knew the use of made dresses. The habit is so entirely Indian in its character, that none will venture to spy in it any resemblance to the *chiton*, the *chlamys* or such other vestments as the soldiers of Alexander brought to India,§ even if it were possible to suppose that it would be at once imitated in stone many hundreds of miles away from the place where it was first exhibited, and the inveterately conservative Indians could be imagined to have resigned, against the common instinct of civilized man in every part of the world, their national attire at the first sight of a foreign garb. The tunic may be compared to that of the Assyrian foot soldier, but its sleeves are long and come down to the wrist, whereas the Assyrian sleeve, as far as can be made out from Leyard's plates, never reached below the elbow, leaving the forearm bare. The boots are particularly worthy of notice, as nothing of the kind has anywhere else been seen in India of so old a date. Three warriors at Amarávatí are habited very nearly in the same way, but without the boots. For ready reference I have copied

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* Wilson's Rig Veda II. p. 288, IV. p. 60.

† "*Sivyatu apah suchya chhidyamanaya*," "may she sew the work with a needle, that is not capable of being cut or broken, with one, of which the stitches will endure, in like manner as clothes and the like wrought with a needle last a long time, according to the commentator." Wilson's Rig Veda II. 288.

‡ A Popular Account of the Manners and Customs of India, p. 120.

§ It may be remarked *en passant* that, according to Plutarch, instead of Alexander teaching the Asiatics the use of made dresses, that hero himself adopted an Asiatic dress. He first put on a Parthian mode. He thought however, "the habit made too stiff and rustic an appearance, and therefore took not the breeches, or the sweeping train; but adopting something between the Median and Persian mode, contrived vestments more pompous than the former, and more majestic than the latter. At first he used this dress only before the barbarians, or his particular friends within doors, but in time he came to wear it when he appeared in public, and sat for the despatch of business." Langhorne's Plutarch, p. 483. Of course this was most probably done with a view to conciliate the conquered people; but it is not very favorable to the theory of Greek dress having been readily adopted by the latter.

as much of two of them as is visible in Mr. Fergusson's plates. (Illustrations Nos. 90 and 91.) Among the sculptures on the temples of Bhuvanes'vara, there are also several representations of needle-made dresses. A basso-rilievo horseman in the dancing hall of the Great Tower, is dressed in a perfect *jámá* of the pattern to be seen on the Rajput horsemen figured in Col. Tod's Rájasthán. Its date, however, is doubtful. Several figures on the Muktes'vara temple are dressed in petticoats or kilts, the Indian *ghágrá*, held round the waist by a jewelled cord or zone. The outline of this habit is so well defined that it leaves no doubt in the mind of its shape and form being due to scissors and needles. The statuette represented in Illustration No. 83, offers a remarkable instance of this habit. The bust of the figure is enclosed in a tight bodice such as is now in common use in many parts of India, and a long scarf, the substitute for a Grecian himation and the North Indian *urná* or *chádar*, is thrown over the shoulders, with its two ends floating in the air. As the figure shewn in the plate is that of Annapúrna, a form of Durgá, offering food in a ladle to her lord, Síva, it is impossible to suppose that the artist has dressed the goddess in a foreign garb, even if it could be shown that foreign models of the kind were accessible to him. The *páyajámá* noticed above (Illustration No. 76), is held round the waist by a string with a chain girdle over it, in the same way as Muhammadan women now wear it, but there is a piece of cloth passed between the thighs and tucked behind, probably also so secured in front, the use of which appears quite inexplicable, unless it be assumed to be an imitation of the cloth which wrestlers use over their short-drawers to tie their body firmly. The short-drawers on the same temple, shewn in Illustration No. 80, though well defined on the figure, appear to be doubtful, as they have besides the longitudinal piece noticed above, a cross belt tied a little above the hip-joint, very much in the same way as the figures of the shepherd Krishna are dressed at Vrindávana in the present day, and in their case it is the *dhuti* that is arranged so as to represent short-drawers, and no sewed cloth is used. The drawers shown in Illustration No. 85, though divested of the cross piece, are also doubtful. Among the Ajanta frescoes, "there is a picture of two holy men, one of them is touching the head of an elephant; he holds a cup in his left hand, and wears a long robe reaching to his feet, with very full loose sleeves; the other, who has a nimbus round his head, has an elaborate drapery in folds like that of a Greek statue."* In the earlier S'ati memorial stones, and in sculptures on the Hullabeed Temple in Mysore, females appear in bodices tied in front. According to the Sáradá Tilaka the women of Guzerat used to button their bodices with gems below the hips.† And in all these occur proofs of the use of the needle in the formation of dresses.

Opinions of Buchanan Hamilton, &c.

It is not to be denied that those instances are few, but their evidence as far as it goes, is authentic and unmistakable, and, I venture to think, cannot be gainsaid. The nature of the Indian climate is such that for nine months in the year all dresses are more or less unpleasant, and even the British soldier here feels, in April and May, more comfortable without his shirt than with it, and, if not prevented by military discipline, would gladly throw it aside; it is not remarkable, therefore, that the natives should confine themselves to the smallest amount of clothing that decency and the habits of the country permit. But that does not suffice for a universal conclusion as to the total absence of all made dresses. At any rate the instances quoted are enough to set aside the theory first started by Buchannan Hamilton,‡ and since adopted by Drs. Muir§ and Watson,‖ regarding the Muhammadan origin of the Indian shaped dress as altogether untenable.

Sanskrit names for tailors.

It has been somewhere said that had the ancient Hindus needle-made garments they would have had in their language names for them as well as for tailors; but that they have none such in Sanskrit. This is, however, not the case. In the Vocabulary of Amara Sinha, there are two words for workers with needle, one applying exclusively to those who confined their profession to darning, and the other to general tailoring.¶ The first is *tantuvdya*, a word very similar to *tantuvdya* "a weaver," and the other, *Sanchika* or *Sáchika*, general worker with the needle. The profession of the latter was of sufficient importance to necessitate the establishment of a separate tribe, and a mixed class, the lawful issue of Vaisyás by Súdra women, was, according to the ancient law-book of Us'anas, destined to live by it, and other manual arts.* These bore the distinctive tribal name of Sauchi or needlemen.

It is not to be denied that in Bengal, with the exception of the A'charyas who are employed in making dresses for idols, and noted for their expertness in darning, tailoring is now the special profession of Musalmans; but elsewhere the case is not so. Mr. Sherring observes: "In addition to the Mahommedans engaged in this calling, there is a considerable number of Hindus of

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* Col. Meadows Taylor, *Edinburgh Review*, for July, 1867.

† Wilson's Hindu Theatre, I. 384. ‡ Martin's Eastern India II. 699

§ Sanskrit Texts, V. 462. ‖ Textile Manufactures of India, 11.

¶ तन्तुवाय: कुविन्द: स्यात्तुन्नवाये तु सैचिक: ।
तुन्नं सिव्यं वयनि ॥ Amara Kosha.

* सूचकाय नियमंचर्मादिभिना सूचका: पृथक् ।
सूचकादिकर्मणां आतसूचक उच्यते ॥
भिन्नवर्मादि यानानि प्रायादक्षवर्म तथा ॥
इत्यौशनसं धर्मशास्त्रं ॥

an inferior caste, who pursue it likewise. They are a separate tribe, and are divided into seven sub-castes or clans, as follows:—1, Srí Bástak; 2, Nám Deo; 3, Tánchára; 4, D[illegible]nesh; 5, Panjábi; 6, Gour; 7, Kantak." An eighth is also found in Benares named Tákseri.*

Sanskrit names of made dresses.

As regards the names of made dresses, it is to be observed that forms of the ancient garments having become obsolete for centuries, their names have [illegible] fallen into disuse, and what formerly indicated particular forms are now accepted as common terms for dress. There are, nevertheless, some words, the import of which cannot be mistaken, such as *kanchuka*, *kanchulika*, [illegible]*ika*, *cholaka*, *chola*, *kurpásaká*, *adhivása*, *nivi*, &c. The most important of these is the first. It is defined as a soldier's dress, shaped like a bodice, a made garment for the body, hanging either as low as the hip or lower down to the legs, *i. e.*, a jacket or a coat. The word *sannáha* used in its definition,† and which is used for a mail coat, as well as a coat of quilted cotton, has led to its [illegible] occasionally confounded with the *varma* or chain-mail, and in some modern dictionaries, it is described as "an iron garment for the protection of the body from arrows;" but that it was formerly made of cloth is evident from its having been used by other than warriors. The sages and hermits, who came to the great coronation feast of Yudhisthira, are described in the Mahábhárata as being dressed in turbans and kanchukas,‡ and in their case it would be inconsistent to accept the coat as a hauberk or a cuirass. The immediate, ordinary, every-day attendants on kings, who should always be old, are also said to be so altered, and from various descriptions it would seem that the garment was made of cloth in the shape of the well-known Indian jámá. The ordinary term for the eunuchs, who guard the zanana of a king, is *kanchuśinas* or "persons clothed with the *kanchuka*," and it is not to be believed that they generally moved about in chain-mail, or solid breast-plates. In the Ratnávalí of Śríharsha, a warder of this class offers protection under the folds of its *kanchuka* to a dwarf, who had been frightened out of his wits by a little monkey getting loose from its chains and gambolling about,§ and this could not have been possible unless the coat had been of cloth with skirts hanging down close to the ankles. In the present day the flowing forepart of the *dhuti*, which looks very like the folds of the skirt of the *jámá*, is called *konchá*. Fair maidens in noble families are said to have, likewise, draped themselves in this garment to heighten their beauty, and it would be absurd to suppose that they used metallic jackets for such a purpose.

The dimunitive of the *kanchuka* is *kanchulika*, and it is universally known to be a cloth bodice, and all respectable women and even goddesses are said to have worn it. Its modern name is *kánchuli*, and it is in common use all over India, except among family women in Bengal. Over it is worn a thin, light jacket reaching to the waist, with sleeves to the elbows. This is called an *angiá*, Hindi *kurtá*. To those who know the Prákrit language, this will at once appear to be a corruption of the Sanskrit *angika*, the *k* being, by a well known rule, changed into *a*. It is probable that the male jacket *angarkhá* of the present day is a modification of the same word, unless it be a corruption of *anga* body and *rakshyá* protection. In Wilson's Dictionary the word *chola* is explained as "a short jacket or bodice;" but it was more like a waistcoat, something closely resembling a *fatui*, or *sairi* of the Mahommedans, for Indian tailors still call the torso or the body part of a coat *choli*, and its appendages *astin* sleeve, and *dámán* skirts, and the Sanskrit *cholaka* is explained to be a breast-plate.

The word *nivi* is also remarkable. It is the name of the tape with which drawers *(pájamá)* or the petticoat *(ghágrá)* is tied round the waist. It could not have had an existence in the language if there had been no *pájamá* or *ghágrá* to tie.

Style of dressing.

The ordinary style in which Urivás of quality used to put on the *dhuti* twelve hundred years ago, is shewn in Illustrations Nos. 81 and 58. It does not differ from the mode of the present time, except in the jewelled girdle with a pendant in front. This appendage, however, was probably introduced to heighten the artistic effect of the figures, and was not in common use. The statue of Kártikeya in the great Tower of Bhuvaneśvara has the *dhuti* tied firmly round the waist, in keeping with the martial character of that divinity. Illustrations Nos. 82, 86 and 87, represent the *dhuti* as worn by common people and labourers. In Sánchi and Amarávatí, the same style is delineated with but slight differences. The *chádar* or scarf occurs plentifully in all the three places, and the mode of wearing it was the same as at the present day. For full dress the *chapkan*-like tunic shown on the archers at Sánchi was probably the prevailing garb for kings, princes, and men of quality; while the long-flowing *jámá* was kept for lower officers of state, warders, and attendants on kings. The scarf was invariably used, either thrown over the shoulders, or tied round the waist as a *kamarband*. The body-cloth under the outer coat was probably the *dhuti* in the generality of cases, military officers of high standing occasionally replacing it by drawers of some kind or other. The *jámá* was probably

* Hindu Castes and Tribes of Benares, p. 341

† भवादृशेनाहवसन्निभेन सन्नाहः ।

‡ विप्रर्षयो यथा दिव्या मौञ्जीयाः शुक्लवाससः । Mahábhárata.

§ अन्तः कञ्चुकिवृद्धकस्य विशति भ्राताद्य वानरः ।

brought by the Aryans from Central Asia, as it is still preserved with a few modifications and mutilations by the Pársis as their national dress; the modifications in their hands, however, have not been so extensive, as in that of the Moslims in India, who in Akbar's time adopted it as a court dress. The pattern preserved in Rajput sculptures figured by Tod, and on the horseman in the Bhuvanesvara temple, is perhaps the nearest approach to the ancient habit; it differs from the modern style principally in having short skirts.

The prevailing character of the ordinary female dress is very much alike in the three places, and Mr. Fergusson's description of Sánchi and Amarávatí, apply equally to Orissa. "The costume of the women," he says, "is difficult to describe, though this is principally in consequence of its scantiness. Both at Sánchi and Amarávatí, the women always wear enormous bangles about the ankles and wrists,* and generally strings of beads round the neck, but their body clothing is generally limited to a belt or it round the body below the waist. From this belt slips of cloth are sometimes suspended, more generally at the sides or behind than in front, and sometimes also a cloth worn something like the *dhuti* of the male sex is also added, but when that is the case, it is represented in the sculptures generally as absolutely transparent."† It may be questioned, however, as to whether these habits were really the prevailing costumes of the country at the time, or only the conventional modes of representing the female form? Mr. Fergusson, who has devoted his attention for some time to Indian antiquity, is disposed to accept the first branch of the alternative, and it is certainly not easy to question the testimony of authentic graven stones. That testimony, however, is in direct conflict with the evidence of equally authentic written records. The passage from the Rig Veda quoted above (p. 78) in which Ushá is compared to "a youthful bride before her husband, uncovering, smiling, her bosom in his presence," depicts a peculiarity of Indian female dress which it would be difficult to conceive had altogether disappeared from the land when the sculptures were incised, and that a bead girdle was the only attire for the body left even to queens and princesses; when improvements in other respects of social life were marked and progressing; when people lived in two and three-storied houses of brick and stone, such as the Sánchi bas-reliefs represent; when they drove about in carriages and wagons; freely wrought in gold, silver, copper, and iron; and manufactured enough of woven fabrics of a superior quality, such as were exported to and greatly prized in the, for the time, highly civilized countries of the West. The veil, the bodice, and body-clothes, are repeatedly mentioned in the Rámáyana and the Mahábharata; and both in the Hindu and the Buddhist codes of law and morality, modesty of dress in women is everywhere insisted upon as a matter of paramount importance. In the ancient code of laws by Sankha, there is an ordinance which says, "Let no woman go out of the house without permission; nor without a sheet over her dress; nor should she be allowed to run or walk very fast; nor speak with male strangers, unless they be tradesmen, hermits, old people, or medical practitioners; nor allow her navel to be seen: she should be so dressed that her clothing should hang down to the ankles; and the breasts should never be exposed."‡ Gobhila enjoins that "women should always wear a sheet, (the Grecian *peplos* or the Roman *palla*) over their body-clothes."§ Harita says, "the first duty of woman (in the morning) is to bathe and put on (clean) clothes;"‖ and among the most important daily duties of woman, Rishyasringa enumerates, "cleanliness, attention to the duties of the house, the polish of the household utensils, bathing, dressing, plaiting the hair in braids, and putting flowers therein."¶ Other authorities are equally particular in this respect, and everywhere the most important duty enjoined on husbands and relatives is to supply good clothing to the ladies of one's house. Manu even goes the length of prohibiting husbands from looking at their wives when engaged in the mysteries of their toilette, and of denouncing the sight of nude females as sinful.* The veil, as a mark of propriety and modesty before seniors and strangers, is everywhere insisted upon, and this idea is carried to the ridiculous extent of prohibiting the offering of the funeral cake to a grandfather without first covering the cake to the mother with kusa grass, as emblematic of her veil, for even in spirit she should not appear before her father-in-law with her face uncovered.† In the case of men not only is nudity prohibited, but even a single garment is held

* The same bangles are still in common use by the lower orders of the people in Orissa, but in sculptures they are generally replaced by articles of lighter and more elegant designs.

† Tree and Serpent worship, 92.

‡ नान्यगः श्वशुरादीनां नानुपुरोगो न चत्वरं व्रजेत् न वस्त्रपूर्वं भाषेतान्यत्र
चिकित्सकाभिवादयेभ्यः न चाभिप्रेक्षेत चादृश्यकारणः परिदधानं न
क्वचिद् विश्रमं कुर्यात् । दासि शक्तः ।

§ प्रावृतां पर्णपोलिमोचिति भोजिनवर्षे ।

‖ स्नानपूजने खल्वा वाससी परिधापिते धारीतस्मृत्यं ।

¶ गृहकर्मणा मनोज्ञिर्मं भूषणानि च पूजनं ।
नित्यमात्मसमं रक्षेत्कर्मयेत पुष्पवासयां । ऋष्यशृङ्गस्मृतं ।

* नाश्नीयात् सह नैनं च पश्येनाश्नन्तमाकुलां ।
न पश्येत् प्रसवन्तीं च भेषजव्यामो द्विजोत्तमः ॥ ४४ ॥
आदि मुखमादर्शमञ्जनं भेषजं च स्त्रियः ।
मात्रेयं चक्षिदद्वेषो न च पादौ प्रसारयेत् ॥ मनु. ४—४२ ॥

"Let not a Brâhman, who desires manly strength, behold his wife setting off her eyes with collyrium, or anointing herself with oil, or when she is in *childbed*, or bringing forth a child." IV. 44.

"Let him not blow the fire with his mouth, let him not see a woman naked, let him not throw any foul thing into the fire, nor let him warm his feet in it." Manu IV. 53.

† पतिमिश्रेण कर्तव्यं पितृपैतृकरणं त्रिया ।
यो मता वि यतैकेन कुर्मेत्सारयन विधुम् ।
अद्यादस्यापनो यस्यात् पितरस्तस्य तद्भवेत् ।
पृथर्दर्भेण या कार्या मातुरग्नुदयाधिभिः ॥ शातपः ॥

insufficient for propriety. Manu forbids a single garment when at meals,* and the Vishnu Purâna ordains that "a man must neither bathe, nor sleep, nor rinse his mouth, whilst naked; he must not wash his mouth, nor perform any sacred rite, with his waistband unfastened; and he must not offer oblations to fire, nor sacrifice to the gods, nor wash his mouth, nor salute a Brahman, nor utter a prayer with only one garment on."† In the *Sâmayâchârika-dharma-sûtra* of Âpastamba even a Brâmachâri, just returned from his noviciate, is required to dress himself with a *jâmâ (kanchuka)* over his body-clothes and to move about with either shoes or pattens on.‡

The Buddhists are equally particular in this respect, and have many positive injunctions against impropriety in dress. Mr. Fergusson suspects that the story given in the Dulva of a lewd priestess, who excited great scandal by wearing in public a piece of muslin of so thin a texture that she appeared naked, and the canons which say, that to go about with thin dress only is absolutely immoral, are of modern origin; but notwithstanding the lavish freedom with which the theory of interpolation has been of late worked out in support of particular ideas, it is not at all likely that anybody will attribute the simile in the Rig Veda to a mischievous tampering with the original by interested and unscrupulous Brâhmans. The only reasonable inference that can be drawn from the passage is, that in the times of the Rig Veda, the covering of the bust was deemed an essential element of female modesty by, at least, certain classes of the community; and that that idea has been since kept alive by their descendants who composed the Râmâyana, the Mahâbhârata, and other later Sanskrit works, is so manifest in them as records that little need be said in support of it. The greatest insult which the wicked Kurus could offer the Pândus, was to order their wife, Draupadî, to be disrobed in open court, and that lady in her anxiety, most piteously prays Krishna to save her modesty. In the first century before Christ, Pururavas exclaims at the sight of his lady love:

> "Soft as the flower, the timid heart not soon
> Foregoes its fears. The scarf that veils her bosom
> Hides not its fluttering, and the panting breast
> Seems as it felt the wreath of heavenly blossoms
> Weigh too oppressively."§

Even woodland maidens at the time could not go about without a covering for their bust, and in the *chef d'œuvre* of Kâlidâsa, Sakuntalâ complains of her bodice being too tightly tied about her chest; whereupon the king remarks:—

> "This youthful form whose bosom's swelling charms
> By the bark's knotted tissue are concealed,
> Like some fair bud close folded in its sheath,
> Gives not to view the blooming of its beauty."‖

In the original Sanskrit, the mode of tying the bodice by a tape behind the neck is distinctly indicated.

That there were certain races or tribes then, as there are to this day, who, like the Kukis, the Pâsuns, and the Gonds wore little or no clothing, is of course a fact not to be questioned. But it is more than probable that they were then, as now, only wild savage tribes who skirted the civilization of the Aryans, and did not represent the social condition of the country: certain it is, that they were not the builders of the Sânchi gateways, nor of the Amarâvatî rails, nor of the temples of Bhuvanesvara.

The annals of the Sâkya race as preserved in Sanskrit, Pâli, Tibetan, and Chinese, represent them to have belonged to the foremost of the Aryan race, the Kshatriyas, whose mode of life, if any faith is to be reposed on those records, was entirely different from that of the Pâsuns and of the Kukis. When Siddhârtha retired from home, he went forth, it is said, in the full court-dress of a prince, which he exchanged for the humble yellow vestment of a hermit, when he arrived at a neighbouring wood. If the sculptures are to be accepted without any qualification, the whole of these records must be entirely rejected, and we must believe that kings and princes, as shewn on Mr. Fergusson's plate, XXI., went about with their bodies all uncovered, while the priests were clothed to the neck with scrupulous care; that Siddhârtha gave up a narrow *dhuti* for something that covered his person from neck to ankles; and that the attire of Mâyâdevî, the mother of Buddha, was somewhat less ample than the traditional "fig leaf" of Eve, consisting, as it does in sculptures, solely of a narrow band cincture below the waist. The large Amarâvatî stone in the Museum of the Asiatic Society of Bengal, represents Mâyâdevî reclining on what appears like a stuffed cushion spread on a cot and provided with a large pillow or *takiâ*; she is attended by armed male guards.

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* Manu IV. 45.

† Wilson's Vishnu Purâna, III. 139.

‡ माणवियमुत्त उपनिवत्थसमयपरोधो मंहिदुपवेहितो कायबंधनी पादुकी। Buhler's Apastamba, 14.

§ Wilson's Vikrama and Urvasi, Act I. Sec. I. II. p. 200.

‖ Williams' Sakuntalâ, p. 15.

and waiting maids holding *chauris*; but she has on her person nothing beyond a bead girdle to cover her modesty.* A prince on one of the Amarávatí stones is seated on a high-backed, cushioned chair with what looks like a stuffed pillow behind him, but he has on his person little beside a cloth girdle two or three inches round the waist by way of dress. His ladies, seated on chairs without cushions or pillows, content themselves with only girdles of beads.† Occasionally the bead girdle is supplemented by a narrow slip of cloth attached to it and hanging behind, but not in front. In one instance in the same collection a Rájá and his little boy are dressed in *dhutis* reaching close to the ankles, but the attendant ladies are all in absolute *déshabille*.‡ In the garden scenes at Sánchi, the lovers always appear dressed, but in two out of four instances, the belles are nude, the other two being decently draped.§ Again, in a grand procession all the men are clothed and turbanned, and even the leading horse has a rich housing, but the ladies of the rajá, who look at the procession from the veranda and balcony of the palace, like the king's guards in a certain island in the South Pacific, whose full-dress consisted of a cocked hat and a pair of spurs, all confine their habiliments to a single article, a bead girdle amidst a gorgeous display of jewellery. One of them has a suspicious looking drinking cup in her hand, and a waiting maid is ready to replenish it from a covered flagon. It is worthy of note that in some instances, women wear a large thick band of cloth round the waist, but it never reaches so low as the hip joint. The so-called Dasyus too are everywhere represented as poor and degraded, but they are invariably dressed, and dressed decently enough for the position they occupy; but the women of the proud Aryans who despise them, and take the lead on every occasion, though richly jewelled, are generally devoid of all clothing. At Bhubanes vara the same scenes are by no means wanting; stuffed cushions shewing traces of buttons or tufting, which held the stuffing in its position, and large thick pillows *(takiás)*, such as are now held in requisition by men of rank and position, are repeatedly delineated, but the people who use them are mostly nudes. It must be observed also that in Sánchi and Amarávatí, perfectly nude males have been carefully avoided, and at Bhuvanes vara are comparatively few, whereas the female figure is very largely exhibited in all the three places in a state of nature, without any artificial covering. Had the nudity and spare clothing been due to race peculiarities, or tribal customs, they could not have been so markedly different among the two sexes. The habits and customs of the wild races now extant in different parts of the earth do not shew that where men and children have been clothed, the female sex has been left entirely without any garment. On the contrary, several primitive hill tribes in India and elsewhere, among whom the men and children go about without any covering for their persons, are particular in providing garbs of leaves or bark for their females; for there seems to exist even among them a sense of decency—a very imperfect and nebulous one, no doubt, formed under their very primitive conditions—but still a sense of decency about covering the person, which prompt them to devise the means of doing so. A notable instance of this is offered by Col. Dalton in his interesting work on the Ethnology of Bengal. Noticing the Juangs of Keunjhar, he says: "The females of the group had not amongst them a particle of clothing, their sole covering for purposes of decency consisted in a girdle composed of several strings of beads from which depended before and behind small curtains of leaves. Adam and Eve sewed fig leaves together and made themselves aprons. The Juangs are not so far advanced; they take young shoots of the Asan *(Terminalia tomentosa)* or any tree with young soft leaves, and arranging them so as to form a flat and scale-like surface of the required size, the sprigs are simply stuck in the girdle fore and aft, and the toilet is complete. The girls were well developed and finely formed specimens of the race, and as the light leafy costume left the outlines of the figure entirely nude, they would have made good studies for sculpture. * * * * Next day they came to my tent at noon, and whilst I conversed with the males on their customs, language, and religion, the girls sat nestled together in a corner, for a long time silent and motionless as statues, but after an hour or two elapsed, the crouching nymphs showed signs of life and symptoms of uneasiness and, more attentively regarding them, I found that great tears were dropping from the down-cast eyes like dew-drops on the green leaves. On my tenderly seeking the cause of their distress, I was told that the leaves were becoming dry, stiff, and uncomfortable, and if they were not allowed to go to the woods for a change, the consequences would be serious, and they certainly could not dance. It was a bright, dry day, and the crisp rustling as they rose to depart confirmed the statement."‖ The tears of the Juáng nymphs are remarkably expressive. A similar instance is narrated by Lieutenant, afterwards Commodore, Lambert in the voyage of one of Her Majesty's ships in the Pacific Ocean. The ship was at anchor close by an island inhabited by savages, who used the smallest possible amount of clothing "that could be made to serve the purposes of decency," and yet when they beheld the ship's crew jumping into the sea-water for a bath without any clothing on their person, they were sorely scandalised. Other instances it would be easy to adduce; but they are not wanted. Taking the facts here noticed into consideration I am led to the conclusion that as regards

* Tree and Serpent worship, plate LXXIV.
† Ibid, plate XXXIII.
‡ Ibid, plate XXXI.
§ Ibid, plate XXXVII.
‖ Dalton's Descriptive Ethnology of Bengal, p. 155.

dress, the prevailing character of the bas-reliefs is due, not so much to ethnic, or social causes as to the exigencies of art. No doubt, the scantily clad Tamulian aboriginal races formed the great bulk of Buddhist congregations, and were more freely and plentifully represented on the monuments of their co-religionists than the Aryans, but their presence alone does not suffice to account for all the peculiarities noticed above. It is probable, therefore, that a conventional rule of art, such as has made the sculptors of Europe prefer the nude to the draped figure;* or a prevailing desire to display the female contour in all its attractiveness; or the unskilfulness of early art; or the difficulty of chiselling drapery on such coarse hard materials as were ordinarily accessible in this country; or a combination of some or of all those causes, exercised a more potent influence on the action of the Indian artist than ethnic peculiarities, in developing the human form in stone. There were, likewise, it is to be presumed, a sense of humour which manifested itself in oddities, caricatures, and grotesque representations, a longing for a display of variety, and a pruriency of imagination which made the females appear in dresses of diverse kinds, and the females in a state of nature. At Bhuvanesvara a religious sentiment, that of veneration for the creative energy of which some traits have been already noticed (*p.* 63) and others will be referred to in a subsequent chapter, was evidently also brought to bear upon art, and to produce an effect highly offensive to good taste. But whether so or not, it would, I think, be as effectual to draw conclusions regarding the costumes of the ancient Indians solely and exclusively from the sculptures they have left behind them, as it would be for the New-Zealander of Macaulay to do the same with reference to the Europeans of the 19th century from the collections of modern statuary in the Crystal Palace, the Kensington Museum and the Louvre.

The argument would apply with equal force to the sculptures of the ancient Egyptians. The paintings and painted bas-reliefs of those people unmistakably show that the higher classes among them were well and sumptuously clothed from the neck to the ankles, and yet their statues and unpainted sculptures entirely belie this. Kings, queens, high priests, and persons of rank appear in them with scarce anything better than rags to hide their nudity, and in many instances even those rags are wanting. The colossal statue of Minerva and that of king Asymandias at Thebes, have nothing more than each a strip of cloth from the hip to the middle of the thighs by way of dress.† The transparent clothing noticed by Mr. Fergusson at Sánchi, which hides no part of the female form, occurs almost everywhere in Egypt, and in some of her most finished carvings. Among the bas-reliefs under the gallery of the western temple in the Island of Philæ, in the sanctuary of the temple of Hermonthis and elsewhere, there are several figures of goddesses, or ladies of rank, seated on chairs, and decorated with rich head-dresses and ornaments in profusion round the neck, but totally devoid of clothing round the waist. The attendants and the priests before them are all decently draped.‡ It would be as reasonable to argue from them that the ancient Egyptians were ill-clad as to deduce from the Sánchi bas-reliefs that the Hindus therein represented, were a naked race. It is true, as justly observed by Carlyle in his "Sartor Resartus" that "by nature man is a *naked animal*, and only in certain circumstances by purpose and device masks himself in clothes." It may be true, likewise, as the same author endeavours to show, that "the first purpose of clothes was not warmth or decency, but ornament;"§ and taking it in that light, it must follow that for decoration man must have clothes, and when he has once got it, his passion for ornament will alone suffice to make him retain it, despite even the "philosophical nakedness" of Shelley's friends,‖ or that of Carlyle which resulted in pictures of "a naked duke addressing a naked House of Lords, naked kings wrestling with naked women," and other vagaries of fancy.¶

It is not to be denied that it is difficult to decide authoritatively the exact form of the female dress which prevailed from twelve to twenty centuries ago in India, but after a careful survey of the sculptures extant, and the notices to be met with in ancient Sanskrit records, I am disposed to believe that the bulk of the women of the country wore the *sárí*; that all who could afford it, added thereto a bodice; that respectable women put on a jacket *(angiá)* over the bodice, and covered the whole with a scarf or *chádar*; and that some habited themselves with the petticoat *(ghágrá)* or the drawers *(pájyámá,)* along with the bodice, the jacket, and the scarf. These dresses were, however, not common all over India, for local peculiarities and custom undoubtedly gave pre-eminence to some of them over others at particular places; but they were known and more or less in use by the people in every part of the country.

Mr. Fergusson has attempted to develope an ethnography of the races represented at Sánchi and Amarávatí from their costume; but the deductions he has drawn do not appear to be well-founded, since the dresses depicted are, as I assume, themselves not always complete representations of what they originally

Dasyus.

* This is well illustrated in the nude statue of Achilles set up in honor of the Duke of Wellington, in Hyde Park to the West of Apsley House, and in that of Charles II. in the great quadrangle of Chelsea Hospital, in which the "Merry Monarch" is dressed as a Roman commander.

† Description de l' Egypte, vol. II. plates 22-28.

‡ Loc. cit., vol. I. plates 22, 27 and 90.

§ "Not for either of these, but to hide the shame of sin," says the Bible.

‖ Hogg's Life of Shelley.

¶ Sartor Resartus.

were when in use in a complete suit, and their evidence can go but little way to indicate the nationality of the figures on which they are placed. This remark applies particularly to the class which Mr. Fergusson denominates "the Dasyus." They "are generally represented as people of the woods, living in thatched huts, wearing a small *dhuti* wrapped round the waist, and possessing no ornaments. Their head-dress consists occasionally of a plain skull-cap, but frequently of plaited or matted hair wound round the head, and tied on the crown in a conical form. Occasionally they allow the hair to hang behind in loose tresses. Most of them have beards: a few appear with shaven chins. They sit with their knees raised and crossed and tied round with a strip of cloth or a napkin, and are occupied in splitting wood or other domestic task; occasionally navigating in rude canoes; but they never seem to mix with the community at large, except for the observance of religious rites. They have invariably by them a chaffing dish with a blazing fire, a pair of tongs, and a bowl which, from its shape, appears to be made of the hard shell of the *gourd*. It was carried about hanging from the left hand. In one instance a man has a stand of the shape of a *morá*, over which he holds something which appears to me, from the tracing of writing on it, to be a scroll or a mass of written paper; a companion of his is folding or unfolding a similar scroll or bundle, and a third is taking up some burning charcoal with his tongs. Mr. Fergusson, following General Cunningham, takes the first scroll to be a flagon from which the man is pouring something into his fire-pot, and the second a fan with which the owner is fanning his fire; but the appearance of the scrolls and the position and action of the hands, according to several intelligent European gentlemen including two professional artists, are entirely against this supposition. Mr. Fergusson himself half suspects them to be hermits, and says they are repeated in the Amaravati sculptures, but attributes it to scarcity of Dasyus at the time.† Some of these figures are repeated on the temples of Bhuvanesvara. They appear old and emaciated, having by their sides a pair of tongs, a gourd pot, and a chaffing dish. The scene is scrupulously true to life, and may be found to this day, not only in every part of India, but even beyond it, and everywhere it represents an Aryan of the third order, *i. e.*, a hermit or ascetic (*Vánaprastha*) seated at his ease, reading his prayer book, or attending to his domestic occupations, and not a non-Aryan. Adverting to some of these hermits on the shores of the Caspian Sea, M. de Pauly observes: "On trouve en outre à Bakou quelques adorateurs du feu, dont la personnalité est particulièrement intéressante. L'aspect de ces feux perpétuels, sortant spontanément de la terre offre un coup d'œil vraiment magique, surtout pendant la nuit; dans le voisinage de ces feux se trouve une sorte de temple ou de couvent dans lequel les derniers débris des antiques adorateurs du feu, représentés par quelques vieux Indous desséchés, presque nus, semblables à des fantômes ambulants, pratiquent sur eux-mêmes leurs macérations contre nature, et célèbrent leur culte idolâtre, triste et misérable parodie de la doctrine de Tserdouschit."‡

Domestic Ties of Hermits.

'General Cunningham, from his thorough knowledge of Indian life, at once took the Sánchi Dasyus for ascetics, and no one who has once seen groups of Sannyásis at Hardwar, Benares, or other sacred places, could for a moment mistake them. The head-gear, the style of sitting, the tongs, the gourd, and the blazing fire, are so peculiar and characteristic, that I, as a Hindu perfectly familiar with the scene, cannot possibly mistake it, and have no hesitation in asserting that the Dasyus in such scenes are entirely imaginary. It might be said that the hermits of the present day are generally celibates, whereas the Dasyus of the Sánchi tope have women and children about them. But the objection is of no moment, as there is ample evidence to show that the ancient Aryan hermits or sages were not altogether free from domestic ties. According to Manu, "when the father of a family perceives his muscles become flaccid, and his hair grey, and sees the child of his child, let him seek refuge in a forest: abandoning all food eaten in towns and his household utensils, let him repair to the lonely wood, committing the care of his wife to her sons, or accompanied by her, *if she chooses to attend him*. Let him take up his consecrated fire, and all his domestic implements for making oblations to it, and departing from the town to the forest, let him dwell in it with complete power over his organs of sense and of action."§ This state of hermitage or *vánaprastha* was subsequently exchanged for that of the *Sannyási*, or houseless mendicant, but the distinction was rarely very rigidly observed, and the transition, when it did take place, was so gradual as to be imperceptible. Hence it is that ancient sages are generally described as living in woods and retired places, but not without women and children about them. Ajigarta, according to the *Aitareya Bráhmana* of the Rig Veda, lived with his wife and three sons in a wood. Kálidása makes the sage Kanva live in a wood with about half a dozen maidens, including Sakuntalá, in his hermitage. Kás'yapa, in the same way, has his retreat full of women of different ranks, and a boy. Sítá is said to have lived in the hermitage of Vasishtha with her two sons who were born there; and

* The remarks which follow on the Dasyus are quoted from a paper of mine published in the *Indian Antiquary* for February, 1872, pp. 36 *et seq.*

† Tree and Serpent Worship, p. 208.

‡ Peoples de la Russie, p. 148.

§ Manu, VI. 234.

almost every ancient story book has its tale of hermitages having feminine and juvenile residents. No doubt those works treat of avowed fictions, but it is not to be supposed that their authors outraged the sense of propriety of their readers by describing hermits having wife and children and female lodgers in their cells, if they had not found such things to be common in their times. The Vedas, the Upanishads, the great epics, and the Puránas, also describe sages, rishis, and munis having females about them; and the presence of such persons cannot, therefore, be taken as inconsistent with ancient Indian ascetic life.

'The same practice also prevailed among the Buddhists, and priestesses or female mendicants—the *Σεμναί* of Clement of Alexandria—are frequently named in the Avadánas, the Játakas and other legendary writings as living in woods. In Mr. James D'Alwis' translation of the *Attanagalu-Wansa* there is a remarkable instance of this. As the story there given is of importance, in connexion with the question at issue, and cannot readily be had for reference, I shall quote it entire.* It forms a part of the Sáma Játaka, and runs as follows:—

Story of Dukúla and Piliyuk.

"Once upon a time when Piliyuk was king of Baranes, Gotama was born unto a hermit, named Dukúla, and was named Sáma. After the son had grown up, Dukúla and his wife Parikí went one day into the jungle in quest of roots and fruits. There they encountered a storm, and being much wet, were obliged to take shelter under a tree close to a hole inhabited by a malignant serpent. Whilst the venerable pair were standing there, dripping from their garments, a cobra issued a venomous blast, whereby they were instantly struck blind. In this helpless condition their son discovered and conducted them home, and began to nourish and maintain them with the affection of a dutiful son. Some time afterwards the king went upon a hunting expedition, and rested on the banks of the Migasammata, not far from the hermitage. He had not, however, been long there before he saw the footsteps of deer that came down to the river to drink; and, thinking that he could kill them, lay in ambush. Immediately a remarkably handsome person with a pitcher came down to the river surrounded by a flock of deer. Amazed at the sight and wishing to ascertain whether it was a nymph of the forest whom he thus beheld, he issued a dart, which, alas! severely wounded him. In the agonies of death the wretched man put his pitcher by him, and, falling on the ground, began to exclaim, 'Who can be the enemy of a person that was devoted to the religious duties of the eight *silas* and ten *kusalas*? Who, indeed, could desire the flesh of an innocent person like myself?' Hearing these cries, the king approached his victim, proclaimed that he was Piliyuk, king of Baranes, explained the motive with which he had shot him, and desired to know who or what he was. Whereupon Sáma replied, 'I was born in this forest, I am the only prop and support of two parents, both aged and blind. Little do they know of the mishap that has happened to me. They will indeed be much grieved and distressed when they find me thus delaying. I alone gave them what they desired. Twice daily have I washed them, and thrice have I fed them. Who indeed will give them a drop of water even after asking ten times? They will be parched like fishes out of water. Who, alas! will succour and help those, who, probably, at this very moment are anxiously waiting my return, and are watching for the first sounds of my footsteps?' Thus lamenting, he began to weep, not for himself, but for the destitution in which he would leave his feeble parents. Horror seized the king at the reflection that his conduct was calculated to deprive of life three persons who had exercised the duties of Brahmachariyá, and that he could not escape the torments of hell, if they all died; and, touched by the lamentations of the youth, he promised to succour and help his parents until his death. Sáma, relying upon his faithful promises, blessed the king, and, desiring him to convey his respects and the sad tidings of his death to his blind parents, closed both his eyes, and dropped down as if he had expired.

"Instantly a goddess named Bahusodari, who had been Sáma's mother in his tenth birth before the present, perceiving the danger to the hermit boy and also to his parents, as well as the king, made her appearance on the spot; and, after rebuking the king for his conduct and advising him how he should behave towards Sáma's parents, watched over Sáma.

"The king, sorely afflicted with grief, picked up the pitcher which had been filled up by Sáma, and, taking the path which had been directed, reached the humble cottage of the blind pair, who sat anxiously watching the return of their son. They now heard the sound of advancing footsteps, but, knowing that they were not those of their son, inquired, 'who approached the door?' The stranger announced that he was Piliyuk, the king of Baranes; and entered with them into a conversation, in the course of which he delicately disclosed their son's fate and the particulars connected with it, offering at the same time to succour them through life. Unbounded was now the grief of the hapless parents, to which they gave utterance in the language of despair, falling down, and each bitterly crying, 'Oh, our Sáma, for one day I have lost my sight, have I, by thy unceasing attentions, felt that I have acquired divine eyes. Where hast thou now gone? How shall I henceforth live? Son, thou hast never done nor conceived any evil towards us, or any other being. Thou hast never uttered a falsehood.

* Since the above was written the story has been separately published in England.

Thou hast never committed life-slaughter; ever hast thou maintained the observance of the *pancha sila*.' The king tried his utmost to console them, but without success. Afterwards, turning to the king, the blind parents addressed him, saying, that they had no faith in his proffered protection, and that all the favour they desired was to be led to the place where Sáma lay. The king complied by leading the point of a stick which the blind ones held in their hands. When they reached their destination, the bereaved parents again gave vent to their feelings by much weeping, and praying to the titular gods. The mother, on examination, finding that all signs of life had vanished, gave utterance to the following *Satya Kiriyá*:—'If it be true that [illegible] Sáma unceasingly devoted himself to the duties of Brahmachariyá, and that he has ever maintained the ordinances of the *Asthasila*; and if it be also true that I have entertained no other faith except Buddhism, and that I have ever performed *tikkuan Bhavana*, may, by the power of those truths, my son receive life.' By the influence of this *Satya Kiriyá*, and by the might of the gods, Sáma moved from one side to another. When the father had also uttered a similar *Satya Kiriyá*, Sáma again moved to a side; and by the power of the goddess already named, he revived, and the parents received their lost sight. Instantly the morning sun arose, and Sáma dismissed the astonished king, after preaching to him on the merits of nourishing one's parents, and above all of leading a religious life, as they were testified to by his miraculous restoration to life."*

'This story will no doubt appear as a Buddhist adaptation of the anecdote of Das'aratha and the blind sage Andhaka as given in the Rámáyaṇa; but it has been reproduced in stone on the standing pillar of the Western Gateway of the Sánchi tope, and [illegible] in it Gotama as Sáma wounded by the king, and his parents, the hermit and his wife, dressed in the same garb which has been assigned to the Dasyus. According to the Játaka, Sáma recovered from his wounds and was restored to his parents, as is shown in the sculpture. The Rámáyaṇa kills the boy, and sends his parents to the funeral pyre, to immolate themselves.

'The following is Mr. Griffith's version of the Rámáyaṇa story as related by the king to the blind hermits:—

"High-minded saint, not I thy child,
"A warrior, Das'aratha styled.
"I bear a grievous sorrow's weight
"Born of a deed which good men hate
"My lord, I came to Sarju's shore,
"And in my hand my bow I bore
"For elephant or beast of chase
"That seeks by night his drinking place.
"There from the stream a sound I heard
"As if a jar the water stirred.
"An elephant, I thought, was nigh:
"I aimed, and let an arrow fly,
"Swift to the place I made my way,
"And there a wounded hermit lay
"Gasping for breath: the deadly dart
"Stood quivering in his youthful heart.
"I hastened near with pain oppressed:
"He faltered out his last behest,
"And quickly, as he bade me do,
"From his pierced side the shaft I drew.
"I drew the arrow from the rent,
"And up to heaven the hermit went,
"Lamenting, as from earth he passed,
"His aged parents to the last.
"Thus unaware, the deed was done:
"My hand, unwitting, killed thy son.
"For what remains, O, let me win
"Thy pardon for my heedless sin."†

'Mr. Fergusson has published this scene in his great work (plate XXXVI.), but he says that "it represents, one of those transactions between the Hindus and Dasyus which have probably only a local meaning, and to which, therefore, it is improbable we shall ever be able to affix a definite meaning."‡ To those, however, who are familiar with the story of the Rámáyaṇa and the Játaka, the improbability will give place to unmistakable certainty, the only difficulty being the presence of a companion of the king in the scene of action, due probably to the Buddhist version having included such a personage in the tale whose name has been omitted in Mr. D'Alwis' abstract as unimportant. According to the Rámáyaṇa, the king went to the wood in his car and was attended by his charioteer. General Cunningham takes the blind hermits to be ascetics, and observes, "I am unable to offer any explanation of this curious scene, but it may possibly have reference to some event in the early life of S'ákya."§ Mr. Fergusson appeals to the scene as an evidence of the Aryans or Hindus having formerly indulged in the wicked pastime of shooting the inoffensive Dasyus; but if my identification be correct, the inference will of course lose its only foot-hold.

Domestic Duties of Hermits.

'Exception might also be taken to my identification of the so-called Dasyus with such hermits on the ground of its being inconsistent for such people to engage in domestic and pastoral occupations. But the laws of Manu do not at all prohibit such pursuits. On the contrary they ordain that the retired hermit should not only live in a hut and go about dressed, but even horde food sufficient to last for a year. He should

* *Attanagula-wansa*, pp. 167 *et seq.*

† Griffith's Rámáyaṇa, II. p. 249. Compare with this another version in his *Specimens of Old Indian Poetry*, p. 12.

‡ Tree and Serpent Worship, p. 138.

§ Bhilsa Topes, p. 225.

also provide means for the performance of various rites and ceremonies, make oblations on the hearth with three sacred fires, not omitting in due time the ceremonies to be performed at the conjunction and opposition of the moon, and also to "perform the sacrifice ordained in honour of the lunar constellations, make the prescribed offering of new grain, and solemnize holy rites every four months, and at the winter and summer solstices."* Nothing has been said by Manu as to the propriety or otherwise of ascetics keeping cattle, but the epics and the Puráṇas clearly show that the ancient sages were partial to milk, and the saintly character of Vas'ishtha was not in any way opposed to his keeping the famous cow Nandiní. The rites enjoined them could not be performed without an ample supply of milk. The Buddhist ascetics, likewise, lived in [illegible], and not seldom collected money enough to dedicate images and topes built at their cost. During their fourmonths of *Wasso* fast they lived in monasteries together with their religious sisterhood.

Worship of Nágas.

'Some of the hermits in the Sánchi bas-reliefs are engaged in worshipping the five-headed Nága; but as the Hindu recognised in it an emblem of the sempiternal divinity Ananta, and the Buddhist, a race of superhuman beings, worthy of adoration, devotion to it would not be by any means unbecoming a hermit, who is required to observe all the necessary regular and periodical rites and ceremonies.

Features of Dasyus.

'The last and most important argument of Mr. Fergusson in support of the non-Aryan origin of the Dasyus is founded upon their features; but in Sánchi the figures are generally so small, so rough, and so weather-worn, that their indications of the aboriginal broad face and flat nose cannot be relied upon. That the appearance of youth, and beauty, and rank, and wealth, should be different from age, decay, decrepitude, and squalid poverty, is a fact which none will question, and therefore what are taken in the sculptures for ethnic peculiarities, may be entirely due to a desire to mark the distinctions of condition.

Origin of the word Dasyu.

'It may be added that the term Dasyu itself is Aryan, and indicates an Aryan, and not a non-Aryan, race. According to Manu "all those tribes of men who sprung from the the mouth, the arm, the thigh, and the foot of Brahmá, but who became outcasts by having neglected their duties, are called Dasyus or plunderers."† And the designation therefore fails to convey the idea which the learned author of the History of Architecture wishes to attach to it.' At Bhuvanes'vara, Puri, and Konárak, some of the statues (not of Dasyus) are from four to five feet high, and many of the statuettes and bas-reliefs are from eighteen inches to three feet in height, and their faces, contour and style, as already stated in the preceding chapter, are of an Indo-Aryan caste.

Coiffure.

Next to clothing for the body, the arrangement of the hair or the decoration of the head, forms the most important element of dress. It has in all ages and in every state of society engaged particular attention, and among savages has often had precedence of most other modes of ornamenting the person. With females, it has been a subject of the most earnest solicitude, and the extravagance to which they have been led in this respect under the fascinating sway of fashion, has often been made the subject of keen satire, of unpitying ridicule, and severe reproof. But the lashings of the wit and the anathemas of the moralist, have invariably proved too weak to set the hair of the head, the loveliest ornament bestowed by nature on the human form, free of unnatural restraints and the most grotesque disfigurements. The glossy ringlets of a young lady drooping gracefully in their native luxuriance, is a style too genuinely beautiful and natural to be let alone by art; and in their place, therefore, the fair sex has everywhere resorted to the most extraordinary, the most extravagant, and the most fantastic contrasts conceivable. In Europe braids and plaits steeped in oils, pastes and pomades, or the tower, the commode, and the chignon of outlandish piles of borrowed hair powdered and curled and bolstered up with bows and pads and basket frames, have always reigned in some form or other; and in India they seem to have exercised their potent sway with no less vigour and influence. Even in the early days of the Rig Veda, the arrangement of the hair was a subject of concern, and peculiarities were often noted. Thus, Rudra is praised as having braided hair (*Kapurdin*).‡ Pushá, in the same way, has a braid on his head,§ and the epithet is, likewise, applied to the Tritsus.‖ In the tenth Mandala, a young female, handsome and brilliant, is said to wear four of these braids. "*Chatushkapardá yuvatih supes'ák ghritapratiká vayunani vaste*" and in VII. 33—1, the priests of the family of Vas'ishtha are said to wear four of these braids."¶ The Rámáyaṇa and the Mahábhárata contain frequent notices of the braid, and of the neglect of the coiffure as a mark of grief or violent excitement. Draupadí, when insulted by Dus'ásana in open court, resolved never again to dress her hair until Bhíma should keep his promise, and tie it up with his hands reeking in the blood of the offender, and had her resolution carried out after the lapse of thirteen years. According to the Rámáyaṇa, a single braid was the most

* Manu VI., 9—10.
† Ibid, X. 45.
‡ Wilson's Rig Veda, I. 301.
§ Ibid, III. 490.
‖ Ibid, IV. 171.
¶ Muir's Sanskrit Texts, V. 462.

appropriate mark of anguish for women during their separation from their husbands, and the Yaksha, in the Meghadúta, is all anxiety to—

"——— Urge his trembling fingers to unbind
The mourner's braid of hair for his long absence twined."*

Dressing of the Hair in Sculpture.

Manu lays down rules for the tonsure, and the different modes of arranging the hair on the crown of the head proper for different orders of the people.† Later Sanskrit authors are profuse in their praises of the various forms of coiffure in vogue in their times; but their descriptions are not precise, and it is not always easy to make out the forms they allude to. This is, however, not much to be regretted, as the available sculptural evidence on the subject is ample. The artists of Orissa seem to have paid particular attention to the subject, and their works represent the dressing of hair and head-dresses in great variety. The specimens shown in Illustrations Nos. 95 to 110, will convey some idea of the forms which the Uriyas, twelve hundred years ago, thought the most attractive and elegant. The simplest and most natural of these was the chignon represented in No. 95, taken from the Great Tower of Bhuvanes'vara. It occurs on a great number of heads, and is generally ornamented with a shield-like boss of gold on the coil, and three double strings of pearls or gold chains on the head. It still prevails in Orissa and in some parts of the Southern Presidency, where the dancing girls seem particularly attached to it. From its bulk, it is evident that some padding, or stuffing, or a profuse admixture of false, or borrowed, hair was used to swell it out. In the present day, bits of rag or braided strings of false hair are the stuffings commonly resorted to. No. 96, from the Temple of Muktes'vara, offers a variety of this form in which the ornaments are replaced by a single string of pearl encircling the head like a fillet, and the chignon proper has two gradually receding tiers of hair placed over it. In front two thick locks are made to curl upwards on the temples. On the Great Tower, several male heads have the same style of chignon, but without the curls. The next most common form is shewn in No. 97. It resembles the modern European chignon as copied in No. 98 from a plate of Parisian fashions in the *Illustrated London News* for 1867, so closely in its make and outline, that little need be said to describe it. It is worthy of remark, however, as affording a notable instance of how fashion repeats itself even under such dissimilar circumstances as those of Orissa in 667 and of Europe in 1867 A. D., and how little taste as regards chignons in the boudoirs of Paris in the present day, differs from that of the belles of Cuttack twelve hundred years ago. A form very similar to it was in vogue in Bengal in the last century; but it has been altogether discarded now. Some male figures at Bhuvanes'vara have head-dresses of a similar, but not exactly the same, form. The chignon of Annapurná at Muktes'vara (Illustration No. 83,) is peculiar and seems to have been uncommon. There are some loose curls on the left temple, the counterparts of which are not to be seen on the opposite side. The style shewn in No. 99 was common enough. Its great peculiarity is, that the chignon, instead of being placed behind the head, is brought to the left side, and made to rest on the shoulder. It is tied across by a jewelled band having a pendant star on each side. A fringe of short hair covers the upper part of the forehead, and upon it is set a triangular tiara of jewels. In the Rig Veda the descendants of Vas'ishtha are described as wearing their chignons sideways, but in their case the right side was preferred.‡ In the present day many Europeans must have noticed Madrasi ayahs with their coil of hair on the left side, and the dancing girls of Oudh, until very recently, patronised the same fashion. Illustration No. 102 exhibits a modification of this style. The hair in it is parted into two coils, and placed on the two sides, leaving the occiput flat. This is common both to men and women. In Illustration No. 103, the true chignon disappears, and is replaced by a fantastic cone curling and twisting upwards behind the head; and the form is further modified in No. 100, in which the hair is tied by a jewelled band two or three inches from the back of the head, and then braided into an enormous ball about two-thirds the size of the head. To preserve these coiffures undisturbed, the ladies who patronised them, must have abjured reclining as long as it was necessary to keep them in position.

Passing over a great number of modifications of these styles, of which no drawings have been taken, I come to Illustration No. 101, in which the coiffure is raised to an angle of 50 degrees, and tied round by a string of pearls. Upon the coil is a round button-like protuberance, but whether of hair or metal, it is difficult to make out. The forehead is encircled by a tiara. This form, without the tiara and button, may still be seen among the poorer classes of Uriyás, and the figures on which they have been seen, occupy positions which indicate that formerly it was likewise confined to the lower orders of the people.

The transition from an angle of 50° to the crown of the head was easy, and the forms in which the hair was arranged there, were various. The most common, and perhaps the most graceful of its kind, is shown in Illustration No. 104. It has

* Griffith's Scenes from the Rámáyana, p. 177.

† Manu, II. 27, 35, 65.

‡ "A white-complexioned accomplishes of holy ceremonies, wearing the lock of hair on the right side, have afforded me delight," &c.
Wilson's Rig Veda, IV. 86.

much the character of the military forage cap which was in use until the first quarter of this century, with the cheek strap passing across from the forehead backward. The strap is edged with two strings of pearls or beads, and has a metal button on the top. The brow has a double string of pearls with a star in the middle, and an ornament on each side very much like a peacock's crest. Judging from the character of the figures on which it occurs, I am disposed to think that this style was in fashion among the frail sisterhood of ancient Orissa. The lady shown in Illustration No. 58 has no strap, and only one string of pearls on her brow; the upper coil of her chignon is larger and made of hair. Her male companion has his hair tied in the same way, but it being short, is seen curling into a mass on the top of the tie. A modification of this style may be seen in Illustration No. 105, where the strap and crests are omitted, the pearls are replaced by a tiara, and the hair is entwined with oblique courses of what, in the present day in India, is gold lace or embroidered ribbon. Illustration No. 106 represents another modification in which the central coil is reduced in size and raised considerably above the crown, and the crests are supplanted by curling masses of hair. Illustrations Nos. 59, 60, 62 and 64 show other variations of fashionable coiffure, and Illustrations Nos. 63 and 83 such as are appropriate to gods and goddesses.

In some cases the hair, instead of being massed into a ball or coil of some kind or other, is allowed to hang in loose masses on the back,* or woven into one or more braids and allowed to hang behind, very much in the style common in Persia and Turkey. Occasionally the outermost plaids are allowed to fall behind the ears and float on the breast. Sanskrit poets are fond of dwelling at great length on the charms of these braids, but with a sad want of gallantry, or with a silly poetical conceit, they generally compare them to hissing serpents. In Illustration No. 107 these braids are twisted into six rays, and kept in an erect position by waxing and enclosing sticks or wire within them. A fringe of short hair covers the brow, and on it is placed a triangular tiara with a crest. In No. 108, the rays are greatly multiplied and arranged in a double row, and the tiara is provided with three crests. Both these are taken from the figures of goddesses. No. 109, likewise, represents the head-dress of a goddess. In it the hair is disposed in the form of a hemispherical casque over the head, then tied round by a band and crest, and the end is made to arch over backwards in three separate masses like the horse-hair plumes of a Grecian hero. The head of Kártikeya in the Great Tower of Bhuvanes'vara is coiffed in the same way, but without the tie in the middle, in excellent keeping with his martial character as the acknowledged great god of war, though he occupies the position of a lieutenant of Síva. No. 110, is *sui generis*. In it the hair is disposed in curling horizontal bands on the two sides of a long upright crest rising from a jewelled tiara.

The ordinary rule regarding warriors and athletes, however, is not to have knots or chignons, but to cut the hair close, and to represent it in a thick, short, crisp slightly-curled state, the effeminate chignon and knot being reserved for common people, and especially for beaus and men of pleasure. This effeminacy still exists among some Uriyás, and in Bengal it was not unknown at the beginning of this century, though the more common style among men of fashion was long curling locks hanging down to the shoulders. This was very like the ancient Greek style, which Miller describes as consisting of "expanding hair curling down over the cheeks and neck in long curved lines," and which "was regarded as the sign of a soft delicate nature."† In the various styles of dressing the feminine hair, there is one peculiarity worthy of special notice,—it is the want of the parting of the hair along the mesian line from the forehead backwards. This parting is regarded by modern Hindú women as a special mark of married life, and no Bengáli lady who has her husband living, will, on any account, allow this to be disturbed. Constantly parting the hair at one particular spot, and tying the locks of the two sides right away, often lead to baldness along the middle line; but the dread of widowhood is too strong to override the custom. This peculiar style of parting is well known in Europe in the present day, and may also be noticed in many antique female heads. For the demi-monde and dancing girls the Alexandrine style of combing back the hair without any parting is the most favourite fashion.

Where the body is generally nude or ill-clothed, it is not to be expected that much will be seen on the head besides the hair; but examples are not wanting of various kinds of caps, turbans and other ornaments for the head. Turbans are rarely seen at Bhuvanes'vara, though this part of the male dress was held in considerable esteem in India, and frequent mention of it is made in Sanskrit writings. Under the name of *Ushnísa*, it is alluded to in the Atharva Veda,‡ and in the bas-reliefs of Sánchi and Amarávatí, a great many varieties of it are represented. Illustrations Nos. 111, 112, 113 and 114, are taken from the temples of Bhuvanes'vara, and show the turban as worn by durwans and sannyásis. The forms differ in no respect from those in common use in the present day. Caps too are not of frequent occurrence. There are, nevertheless, several specimens of rich caps which are

Turbans and Caps.

* At Amarávatí, Mr. Fergusson notices a comb behind the head to hold these loose masses of hair together, but it has not been met with at Bhuvanes'vara.

† Miller's Ancient Art and its Remains, p. 354.

‡ Muir's Sanskrit Texts, V. 462.

worthy of notice. One in the Temple of Vaitál Devi is very like the forage cap which was in common use by officers in the English army until the beginning of this century. A brocaded specimen of it occurs on the head of a dancing girl in the same temple. (Illustration No. 115.) Caps of various kinds may also be seen in the bas-reliefs of Sánchi, Amarávati, and Udayagiri. The modern bridegroom's light wood crown, the *kopar*, is common everywhere.

Beard.

The turbaned figures are all bearded, while those of men of rank and position are all smooth-chinned. In fact, the practice of cultivating the beard has never been in fashion among the ancient Hindus, and even among the earliest Aryans of the Vedic times, the razor* and the barber were in every-day requisition. It is true that certain days of the week, particularly Saturdays, and certain constellations are reckoned inauspicious; but this is overridden by the ordinance which requires that all vows, fasts, and śrádhas, should be preceded by shaving and paring of the nails, the penalty for the wretch, who neglects it "being a sojourn in the next life for twenty days or twenty years in a vat full of hair and nails, during which he has to eat nails and hair, and be constantly beaten with a stick."† The ordinary practice of house-holders is to shave frequently, not unoften every day. In this peculiarity the Hindus closely resemble the ancient Egyptians, who, says Herodotus, "only let the hair of their head and beard grow in mourning, being at all other times shaved." "So particular, indeed, were they on this point, that to have neglected it, was a subject of reproach and ridicule; and whenever they intended to convey the idea of a man of low condition, or a slovenly person, the artist represented him with a beard. It is amusing to find," adds Sir Gardener Wilkinson, "that their love for caricature was not confined to the lower orders, but extended even to the king: and the negligent habits of Rameses VII. are indicated in his tomb at Thebes, by the appearance of his chin blackened by an unshaven beard of two or three days' growth."‡ The ancient Greeks and the Romans entirely differed from the Hindus and the Egyptians in this particular. The Romans cultivated the beard until the year 299 B. C. when P. Ticinus Mena, having brought barbers from Sicily, introduced the custom of shaving at Rome, and, as Pliny states, "Scipio Africanus was the first Roman who shaved every day."§ The Greeks, down to the time of Alexander the Great, failed to appreciate the comfort and cleanliness of a shaved chin, and on that account were held in such abhorrence by the Egyptians, who followed the cleanly Indian custom of shaving, that, according to Herodotus, "no Egyptian of either sex would on any account kiss the lips of a Greek, make use of his knife, his spit and cauldron, or taste the meat of an animal which had been slaughtered by his hand."‖ Among Indians, sages, hermits, and men who had renounced the pleasures of the world, as also men in mourning, kept it as a mark of penance like the Egyptians¶ and the Jews,* and unlike the Greeks, who shaved on those occasions. The bearded Hussar officer, who is so irresistible among the belles in Europe, would have found scant chance among the damsels of India, who seem to have detested the beard, and to account for the blindness of Dhritarashtra, a story is told in the Mahábhárata, in which a lady closes her eyes at the sight of her brother-in-law in a beard.

Shoes and Boots.

Of ancient shoes, I met with only one variety, the slipper, with a slightly upturned front, but all the carvings of it that came to my observation were, owing to their small size, and the decay of ages, so indistinct that I could take no drawing that would be worth having. Two or three pairs of pattens, *kharaons*, seen were also in the same predicament. It is probable that in India these articles of dress were held in about the same requisition formerly as now; but that they were well known and in common use by all who could afford to get them, is evident from there being more than one Sanskrit name for them. The circumstance related in the Rámáyana of Bharata's placing on the vacant throne of Ayodhya a pair of Ráma's slippers and worshipping it during the latter's long protracted exile, shows that shoes were important articles of wear, and worthy of attention. The episode on the subject is one of the most affecting in the Rámáyana, and displays to perfection the mastery with which old Válmíki, the Homer of India, touched the tenderest chords in the heart of his reader.† In Manu and the Mahábhárata, the slippers are also mentioned, and the time and mode of putting

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* "Sharpen us like a razor in the hands of a barber." Wilson's Rig Veda, IV. p. 233.

"Driven by the wind, Agni shears the hair of the earth like a barber shaving a beard." Rig Veda Mandala X. 142—4

† यस्मात्सुरुषवापार्थं वाक्यदोषात्स पंचमी ।
न करोति यदा कार्यं श्मश्रुणि च नखानि च ।
स च तिष्ठति कुण्डे वसादीनां च सुन्दरि ।
सप्तविंशमवापार्थं मज्जानी दशवार्षिकः ॥
दंत वर्षशतं चैव नखानिच दश अध्यायः ॥

‡ Ancient Egyptians, III. p. 357.

§ Pliny, VII. 59, quoted Wilkinson's Ancient Egyptians, III. 359.

‖ Herodotus, II. 41 and 91.

¶ Ibid. II. 36 and III. 12.

* Genesis xli. 14.

† When Ráma expressed his firm resolve not to return home even were "the cold to forsake the Hills of Snow", and the Ocean to retire from its shore, Bharata said—

"Put, noble brother, I entreat
"These sandals on thy blessed feet
"Times, lord in mail with gold bedecked,
"The realm and people still protect."

Adding—

"Through fourteen seasons will I wear
"The hermit's dress and matted hair;
"With fruit and roots my life sustain,
"And still beyond the realm remain.

them on pointed out; and mediæval Sanskrit authors allude to them pretty frequently. The Vishṇu Purāṇa enjoins all who wish to protect their person, never to be without leather shoes.* Manu, in one place, expresses great repugnance to stepping into another's shoes, and peremptorily forbids it,† and the Purāṇas recommend the use of shoes when walking out of the house, particularly in thorny places, and on hot sand. In the "Toy Cart" of Śūdraka, which dates from the first century before Christ, the mother of a rich courtezan is described as arrayed in flowered muslin with her feet thrust in a pair of slippers,‡ showing that in ancient times, as in the present day, women of the town were in the habit of wearing shoes. Whether family women ever wore them, I have not yet been able to discover; but there is no text forbidding such use that I am aware of. At Sāñchi there is a corps of musicians dressed in kilts, and wearing sandals, tied to the leg by crossed bands, very much in the same way in which the ancient Grecians fastened their sandals. Nothing similar to them has any where else been noticed in India. (Illustration No. 160.) The boots at Udayagiri, reaching up to the knee, have been already alluded to, (Illustration No. 94,) and I have seen several specimens in other parts of India. Woodcut No. 21, shows a boot taken from a figure of Sūrya found near Surajpokhar in Behar, which from the circumstance of the worship of Sūrya, a Vedic divinity, having become obsolete for over a thousand years, I believe to be about twelve hundred years old. Its top is cut aslant like that of a Hessian boot, and the rim is decorated by a border of lines and dots, the Udayagiri specimen having the top plain and evenly cut like that of a Wellington boot. Woodcut No. 22, is from an attendant of this Sūrya, and differs from the last in having the whole of the leg part of it ornamented by oblique lines, leaving the foot plain. A second image of Sūrya, found in the same locality and of about the same age, shows a bootee or something like a ploughman's highlow, covering about one-third of the leg, and having both its leg and foot parts marked with diagonal lines: it resembles very closely the side spring boots of the present day, but without the springs. (Woodcut No. 23). On another figure of Sūrya, found near Murshidābād, which, judging from its material and make, I take to be of about the same age as the preceding two, there is a boot the top of which has a Vandyked edge marked with double lines. (Woodcut No. 24). The desecration of this figure by a European, lately formed the subject of a criminal action in the High Court of Calcutta, and it was then brought to light that its true character was unknown to the people, and that it was worshipped as an image of Vishṇu. A sixth specimen is to be seen on the temples of Kedāreśvara and Muktēśvara as also on the back frame of the Muktēśvara Sūrya, and in it the top is so cut as to leave a flap like the Napoleon flap projecting in front and another behind, the sides showing triangular notches. (Illustration No. 160.) This boot is also remarkable from the circumstance of its being worn by a lady: her lover has boots of the same kind. Curiously enough the figures on which these boots have been found are all dressed in *dhotis*, having the upper part of the body bare. None of the boots shows any marking for the sole or heel, and so they may be taken for moccasins, or buskins without the cork soles which were used to add to the height of actors on the Grecian stage. That the boots or buskins under notice are genuine Hindu articles of dress, and not borrowed from foreigners, is evident from their having been known from very ancient times. Pāṇini notices a variety of boots which covered the whole of the foot and was tied at the ankle. Its name is *saṃpadīna*. It must have been common enough at the time to serve as an example for the illustration of a rule in grammar, and already so old and familiar as to have lost its radical derivation in the mazes of antiquity.§ Āmara Siṅha describes it as a kind of shoe that covered the whole of the foot, *Pādāpohati sarvāṅgapadīna pādarakṣā*, and most of his commentators, who lived after the advent of the Muhammadans in this country, explain it by reference to the familiar Persian boot called *mujah: mojā iti khyātaḥ*. Pandits of the present day, finding that in India the word *mujah* is used for stockings or socks, suppose that *saṃpadīna* means that article: but neither the interpretation of Āmara, nor the original meaning of the Persian word, supports their inference. Bharata Mallika says that it was an ankle-boot सर्वं पादमाच्छाद्य पादाग्रं पादगुल्फमाक्रामति, अमुदादौ मोजा ख्याता स्यात्।

No. 21.

No. 22.

No. 23.

No. 24.

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* "Longing for the [illegible] earth,
"The rule and all duties of caste
"I, to those shoes, will delegate.
"And if, O tamer of my foes,
"When fourteen years have run out their close
"I see thee not that day [illegible]
"The kindled fire may [illegible] born."
Griffith's Rāmāyaṇa II. p. 488.

* यमोपघातादिके वधी प्रयोगः प्रदीपे च।

† अन्यस्य पादयोर्मे योपघातकः सदा भवेत्।
Vishṇu Purāṇa, Book [illegible] p. 12.

‡ Manu, Ch. IV. 66.

§ *Mallinātha.* "And [illegible] who is that lady [illegible] is dressed muslin, goodly [illegible] truly: her feet, tender [illegible] with red [illegible] into a pair of slippers [illegible] sits in state on a gorgeous throne."
Id. Ch. [illegible] of my lady's mother." Wilson's [illegible] Theatre, II. p. 87.

§ § ६ अमुदादौ मोजादौ च अमुदादेरः पादीनां प्रयोजनं।

मुञ्जादिसञ्चितमप्येवपदं अनुपदं, साकल्ये अव्ययीभावः। [illegible] पदं आप्नोति अनुपदीना। In the *Amarakosha-mâlâ* of Paramânanda, we read सेवागतन् यदसमायतो दीर्घा चेत् अनुपदीना यदस्य तुल्यायां स्यात् अनुपदस्य तुल्यायां स्यात् अनुपदस्य चायाम इत्यव्ययीभावः। As. Soc. MS. 448, fol. 412. That the Persian *mujâh*, when first it produced in India, was a boot or buskin, *i. e.*, an outer leather covering for the foot, is evident from such phrases as موزه گل ماندن "to have one's *mujâh* stuck in clay" *i. e.*, being under a difficulty—موزه پای "to put forth the *mujâh*" for proceeding on a journey, having become idiomatic and proverbial in the Persian language. The last is equivalent to the American slang "pull-foot," which again is a Yankee version of the "*Arraipon ta hupodemata mou*" of Euripides. Had the *mujâh* meant a sock, or an inner covering protected by outer leather shoes, it could never have been used for starting on a journey.

The material for these boots and shoes was ordinarily bovine leather, and even the hide of the sacrificed cattle was not excepted. According to Sâtvatya quoted by Âśvalâyana, the hide of the cattle sacrificed at the *Sûlagava* ceremony, was fit to be converted into shoes and other useful articles.*

Ornaments.

The passion for personal ornaments and decoration is common to every state of society. It may have been chastened and modified under particular circumstances, but it has never and nowhere been altogether suppressed. The jackdaw's feathers and cowrie-shell necklets of some of the Pacific islanders may have been replaced in the boudoirs of Paris and the drawing-rooms of England by the magnificent plumes of the ostrich and brilliants of unrivalled lustre, and in Asia by the pinions of the bird of paradise and orient pearls of exquisite perfection, but the desire for them remains the same, and equally ardent everywhere. It is not remarkable, therefore, that it prevailed to an inordinate extent in ancient India, under conditions, climatic and social, the most favourable to its growth. To judge from the records and relics now accessible, the passion seems to have manifested itself in an inordinate fondness for gold jewellery for different parts of the body, and the deities of the Rig Veda constantly present themselves adorned with a variety of them. Rudra is described as "firm with strong limbs, assuming many forms, fierce and tawny coloured, shining with brilliant golden ornaments,"† and wearing "an adorable, uniform necklace." The Marats decorate their persons "with various ornaments,"‡ "they are richly decorated with ornaments," and "shining necklaces are pendant on their breasts."§ The Aśvins are also adorned with golden ornaments. The Asuras, like their rivals, had, likewise, plenty of "gold and jewels,"‖ and human beings, whose ornaments were no doubt the prototypes of their celestial counterparts, were certainly not without their due share. Accordingly we find the sage Kakshîvat praying for a son "decorated with golden earrings and jewel necklace;"¶ and among largesses to priests and Brâhmans, gold in lumps or in ornaments, is prominently mentioned. In the Nirukta of Yâska and the grammar of Pâṇini, not only ornaments, but names of various kinds of them, are enumerated, and Manu defines the nature and duties of the caste whose especial vocation was to manufacture them, and the punishment meet for fraudulent adulteration of gold. The old vocabulary of Amara Sinha gives names for crowns, circlets and tiaras for the head; of rings, flowers and bosses for the ears; of necklaces of one to a hundred rows, and of various shapes and patterns; of armlets and bracelets; of signet and other rings for the fingers; of zones and girdles for the waist for both men and women; as also of ornaments of bells, bands and chains for the leg and ankle. Although fashion has rendered the forms of many of the ancient ornaments now obsolete, most of the names are still current in connexion with their substitutes, and the sculptures of Bhuvanes'vara afford us a pretty fair notion of what their shapes were twelve hundred years ago. The bas-reliefs of Sânchi and Amarâvatî also exhibit specimens of a great variety of ornaments for the hands, feet, waist, neck, and head. In the absence of positive information regarding the ethnography of the peoples represented in these three places, it would be wrong to take the ornaments shown as illustrations of the jeweller's art as extant among a single race from the second or the first century before Christ to the seventh century of the Christian era; but taking India as a whole, they show a gradual, steady and marked advance towards refinement. The bangles, bracelets, and anklets of Sânchi, are the clumsiest possible. They are thick, rough, and heavy, almost devoid of workmanship, and large enough to cover from one to two-thirds of the legs and fore-arms. Judging from specimens still in use among the lower orders of the people away from urban influence, they must have been made, in most instances, of brass or bell-metal. The bangles and armlets of Amarâvatî, though mostly of the same patterns, are smaller, lighter and neater, and the anklets are somewhat less ponderous. At Bhuvanes'vara they are not only reduced in size and weight, but greatly improved in appearance. Amidst a few of the older forms there is quite an abundance of specimens, which for neatness, elegance, and beauty, would not stand in any great disadvantage besides the finest specimens of their times from any other part of the world. Nor is this remarkable, considering the celebrity which India has enjoyed from remote antiquity for the excellence of her ornaments. Adverting to it, Mr. Maskelyne, in his Report

* चेर्म चर्मणा कुर्वीतेति आसन्न। [illegible] भूषागदादि कुर्वीतेति मध्ये।

† Wilson's Rig Veda II. 221.

‡ Ibid II. 179.

§ Ibid IV., 124—2[illegible]

‖ Ibid I. 91.

¶ Ibid II. 6.

on Jewellery and Precious Stones in the French Exhibition of 1866 (class XXXVI), says: "It is said that even that delicate and most sensitive instrument of touch, the hand of the Hindu, is not sufficiently sensitive for fashioning the finest sorts of Indian filigree, and that children alone are employed in the manipulation of such a spider-web of wire. Of fabrics so delicate, nothing is to be seen among the jewellery at Paris, indeed the best of the Indian filigree, and that by no means worthy of its source, is to be found among the articles exhibited under the goldsmith's class. It is to be remarked of this elegant and primitive, perhaps very earliest, form of ornament in precious metal, that it had probably reached its limits for delicacy and design at a very archaic period, and has made no real progress in recent times; that, in fact, the early Greek filigraner worked with as much facility and delicacy as the Hindu artisan of our day, who inherits the skill and the methods he uses by the direct descent of an immemorial tradition. But there are other forms of the goldsmith's art scarcely less venerable than that of the filigranes, possessed of great native beauty, and which also have survived in India, through the long roll of centuries, as the Zend and Sanskrit languages have survived there, the inheritance of families or clans. Those forms of art are perishing one by one, as the family in whom it may have been handed down becomes extinct or lets the thread be broken, each of these hereditary industries of India moves on with time to its extinction." It is of course impossible to expect specimens of filigree in sculpture, but the ornaments exhibited by no means fail to support the pretensions of the country to superior excellence in the goldsmith's art.

Crowns, coronets and tiaras.

When treating of coiffure frequent references have already been made to crests, coronets and tiaras. Crowns were held in much higher estimation; and carvings of a great variety of them, some of elaborate workmanship are to be met with. The richest crown that has come to my notice, is one worn by the goddess Indrání at Jájapur. In outline, it is very like an Iránían cap, but most sumptuously bedecked with jewels all over. Illustrations Nos. 63 and 142 also exhibit crowns for gods, but of less pretension: the circlet in Illustration No. 116 is so like a ducal coronet that it may be mistaken for one from the head of Richard Cœur-de-lion. The *Ashṭanáyikás* of Jájapur show other and remarkable specimens.

Ear ornaments.

Ornaments for the ears are also exhibited in great variety, but owing to their small size and the rough usage to which the hands, nose and ears of most of the statues had been subjected by the Moslem invaders, I have not been able to obtain drawings of a sufficient number of perfect and well-marked specimens. My drawings include representations of only five varieties, but they are characteristic, and will, it is believed, prove interesting. No. 121 is from a female figure in the Great Tower of Bhuvaneśvara. Its drooping plume and fan-like appendage are peculiar, and have been noticed on several male figures. Sometimes the fan, probably made of party-coloured fringed cloth, is surmounted by floating ribbons. (No. 63). The *tálapatra*, or "palm leaf ear ornament," named in the Amarakosha, was probably no other than this fan. Illustration No. 122 from the same place is worn on the ears hooked in a hole in the helix or outer rim, or tied to the hair near it. It is still in use on the top or sides of the head, and is known in Bengal, where it is made of jewelled gold plates and strings of pearls, by the name of *jhumná*. Illustration No. 120 is called *karṇaphula*, or "the ear-flower," and has a pretty tulip drop; it has been taken from a figure of the boar incarnation in a small temple adjoining the Great Tower. The ornament was a great favourite of Durgá, and the famous Maṇikarṇiká of Benares derives its name from the circumstance, says the legend, of the goddess having by accident dropped an ornament of this kind at that sacred spot. Illustration No. 118 from the Márkaṇḍa Tank in Puri is now known in Bengal by the name of *dhenri*. It is a shield-shaped disk of gold worn on the lobe of the ear, sometimes with, and sometimes without, a pendant. Illustration No. 119 from the Great Tower represents two ornaments, a tulip drop, hung from the antitragus, and a stud with pearl fringe and pendant, attached to the lower edge of the lobule. Several other forms will be noticed in some of the illustrations attached to this work.

Nose ornaments.

Studs and rings for the nose set with stones or pearls are great favourites in the present day, and were probably not unknown in former times. In the *Sáradá Tilaka*, mention is made of an Andhra lady "whose graceful ear is decorated by the scroll of gold; whose nose-ring set with pearls trembles to her breath; and over whose bosom spreads the saffron-dyed vest;"* but no such ornaments have been met with in sculpture.

Necklaces, bangles, bracelets, &c.

Of necklaces, the finest specimens are to be seen in the Illustrations Nos. 63 and 142. In their lockets the collets for the setting of precious stones on a gold frame is distinctly indicated. Some of the pendants of the large necklace of the male figure, Kártikeya, appear as if intended to represent tiger's claws mounted on gold, a favourite charm still in use in some parts of India. The small necklace is formed of small lockets edged with pearls. The garland across the chest was probably formed of flowers, though the bell-shaped pendants of Bhagavatí's garland

* Wilson's Hindu Theatre II., p. 385.

would suggest the idea of its being the representation of a metallic ornament. The necklet of Bhagavatí is formed of stars of five pearls or gold beads each, and a string of pearls is worn between the principal necklace and the necklet. A string of bells descends from the right breast, and a string of pearls or beads passes from the right shoulder to the left side.

Ornaments for the Hand.

Of ornaments for the forearm the most important in the present day is the *bálá*, a ring of metal of a cylindrical form, ordinarily plain, but sometimes twisted or otherwise wrought, which Bengali women reckon as the emblem of their married state, and never open it as long as their husbands are living. If made of gold or silver it generally encloses a bit of iron, but a separate annulet of iron is also commonly worn which more forms, like the European marriage ring, the emblem of the married state. In Orissa the *bálá* is replaced by the *thára*, which differs from the former in being flat, and not cylindrical. Its under surface is flat and smooth, but the upper is wrought in various patterns, a beaded form being the most prevalent. In sculpture it is the commonest, and in rich specimens has an elaborate boss or crest-like appendage on the top. (Illustration No. 129, A.) The beaded pattern is sometimes edged in by rims of which Illustration No. 132, A offers a good specimen; at other times it is doubled omitting the crest (Illustration No. 124), or the spaces between the two circlets widened, or arched, or otherwise developed and ornamented. (Illustrations Nos. 123, A, 125, A, 126 A, and 127, A.) In Calcutta the last is in common use, and is known under the name of *patwári*; it is the exact counterpart of the European bracelet. Illustrations Nos. 128, A, and 131, A, exhibit the well-known conch-shell ornament *(sankha)*. It is formed by cutting the shell (*Mazza Rafa* of Lamark. *Turbinella Rafa* and *Valuta gravis* of Sir E. Tennent) into annulets, and eight or ten of them are arranged in a tapering form, and then mounted with gold beads, bosses and other decorations; some of the annulets are left white, while others are dyed with lac of a bright crimson colour. It has now entirely gone out of fashion in Calcutta, but among the poorer classes in Orissa it reigns supreme. A form of it made of gold, and buffaloe horn or of gold and horn set with precious stones, and called *pet-á chari*, has also lost its hold in Calcutta; but it still continues a favourite amongst Uriya belles. For the arm the *bájú*, the *tábíj* and the *tad* were, until recently, the leading ornaments, and Illustrations Nos. 128, B, 130 and 127, B, exhibit very choice specimens. The *bájú* is apparently mounted with precious stones, but the others are simply wrought metal. In Illustrations No. 125, B, and 124, B, there are two specimens of the *tábíj* quite different from what is known in the present day, and No. 129, B, improves upon No. 123, B, by adding to it a fringe of small bells. Illustrations Nos. 127, C, and 132, C, show various kinds of finger rings and the mode of wearing them. The figures of Bhagavatí and Kártikeya bear on them some rich specimens of annulets and bracelets. (Illustrations Nos. 63 and 142.)

Waist ornaments.

With the Grecians the zone was a most important article of attire, for it served not only as an ornament, but as a belt to tie the chiton round the waist, and produce those graceful and charming folds in the drapery which have formed the theme of admiration to all lovers of the classic art. In India it had not this double duty to perform, but it was nevertheless held in high estimation, not only by the fair sex, but even by grown up men; and in sculptures all persons of consequence are decorated with it. It was made of various forms, but a fringe of bells was held in the highest favour, and known under different names. Sometimes it was worn tight like a belt, but at others loosely like a garland of many rows. The form most in requisition was called *chandrahára*, or "the garland of moons," Uriya *goti*, and the most gorgeous specimen of the mediæval style of it is seen on the figure of Bhagavatí above noticed. (Illustration No. 63.) It is formed of three massive chains of a curious diagonal pattern, set with spangles, and held together in front by a rich and elaborate clasp having a jewelled pendant. From the lowest chain hang a series of bells and pendant chains festooned all round the body. The zone of Kártikeya (Illustration No. 142) is quite as magnificent, but its principal pendant is even more elaborate and gorgeous. Zones of less pretensions may be seen on plate XXII.

Leg and foot ornaments.

The exigencies of climate have not permitted European ladies to devote any attention to ornaments for the legs and feet, except in the decoration of their boots and shoes as also the garter, which in the middle ages was an important female ornament. The case has been very different in India, and rings for the toes and anklets and leglets of various kinds have been current from an early epoch. The most favourite among them was a chain band round the feet fringed with little bells, or small metal shells filled with shots, which made a jingling sound when in motion. (Illustrations Nos. 138, 139 and 140.) It was called *kinkini* and worn by both sexes. A form of it, called *pinjara* from the Persian *Páyzeb*, is in Bengal now given to brides only, and rejected within a year or two after marriage; but up-country women and Muhammadan ladies wear it till an advanced age. Modifications of this ornament are shewn in Illustrations Nos. 134, 135 and 140, where the chain is replaced by hollow tubes filled with shots. These are called *Núpura* in Sanskrit. Illustrations Nos. 133, 134 and 139 represent anklets, of which No. 133 and the upper one of No. 134 are the only ones now in use. They are called

Gujri, from having been first introduced by the belles of Gujarat.* They are made hollow and filled with shots, or rings with bells. The ornaments exhibited in Illustrations Nos. 136, 137, and the upper one of 138, were confined to Orissa and Telingana, where the dress worn was generally short, and the leg was left sufficiently bare to display them. They were worn by both sexes but on one leg only. A modification, consisting of a curiously bent rod, is still in use in some parts of Orissa, and is known under the name of *bánkmala*. It was unknown at Sánchi and Amaravati. Illustration No. 140 shows some toe rings.

Pearls and precious stones.

It is scarcely necessary to observe that, with the exception of the collets noticed above, there is nothing in the sculptures to show what the ornaments were made of, but seeing that pearls have been fished along the Coromandel Coast from long before the time of Alexander's invasion; that pearls, precious stones, and gold, as elements of ornament, have been known in the country from times immemorial; and that Manu ordains a fine for "piercing fine gems, as diamonds of rubies, and for boring pearls or inferior gems improperly," there need be little doubt as to what their materials were. Of course it is possible that what I take for pearls may have been only beads of metal, or stone, or baked clay, and the bangles may have been of bell-metal; but it is not very probable that the princes, under whose orders the temples were designed and built, always satisfied their passion for ornaments with nothing more precious. In the Brâhmana of the old recension of the Yajur Veda, which dates from at least eight centuries before the Christian era, jewellery is recommended to be strung in gold.† The word used for jewellery is *Kácha*, which may mean glass, or glass beads; but it would be unreasonable to suppose that those who set glass on gold, did not follow the same procedure with diamonds, rubies, and other precious stones, for which they had names, and which they knew and prized. In the first century before the Christian era, Súdraka in his play of the Toy Cart, did not think it inconsistent to describe in the courtyard of a common courtezan's house, jewellers' shops, "where skilful artists were examining pearls, topazes, sapphires, emeralds, rubies, lapislazuli, coral, and other jewels; some set rubies in gold; some work gold ornaments on coloured thread, some string pearls, some grind the lapislazuli, some pierce shells, and some cut coral."‡ Nor were the people satisfied with such originals; the requirements of society rendered the fabrication of false jewellery a commonly practised art. This is evident from a passage in the same play, in which a question is raised about the identity of certain ornaments produced in a court of justice, whereupon the Judge asks:

Judge. "Do you know these ornaments?"

Mother. "Have I not said? They may be different, though like. I cannot say more; they may be imitations made by some skilful artist.

Judge. "It is true. Provost, examine them; they may be different, though like; the dexterity of the artists is no doubt very great, and they readily fabricate imitations of ornaments they have once seen, in such a manner, that the difference shall scarcely be discernible."§

Eight centuries after that time Uriyá Rájás may be supposed, without any great stretch of imagination, to have had some such bijouterie.

Looking-glasses.

Looking glasses deserve to be mentioned as a part of the toilette, for in ancient India, they were rarely designed as ornaments for rooms. The most rudimentary form of this article appears in finger rings, in the shape of bits of crystal set on foils. Such rings were formerly, as at present, worn on the thumb, and many sculptured nymphs may be seen beholding the reflection of their countenances on their rings. Larger specimens of a circular, oval, or oblong shape, framed and mounted on handles, are not wanting, and these invariably occur in the hands of young ladies. Woodcut No. 25. What the reflectors were made of, whether foiled glass, or crystal, or polished metal plate, I cannot ascertain. In the Sanskrit language there are several words to indicate mirrors, and most of them are derived from roots implying reflection, but none a metal, or polishing. In the mediæval and later feminine works the words are largely used, but I have not yet met with any of them in the Rig Veda Samhitá. To persons acquainted with crystals and metal foil and familiar with the art of preparing false jewellery, the idea of setting small plates of crystal on foil for the manufacture of looking-glasses would be easy enough, and that is the way, most probably, in which ancient Indian mirrors were made. Polished metal plates were, however, frequently used, and in the present day orthodox people prefer them to foiled glass in connexion with religious ceremonies. Such plates are usually made of silver steel, brass, or a speculum metal in which silver predominates. The ancient Egyptians preferred copper, or an alloy of copper and tin, *i. e.*, bell metal; but the Hindus hold that alloy as impure, and never use it for religious purposes. For ordinary, every-day, domestic utensils and ornaments, however, it

No. 25. Looking-glass.

* Thus in the *Sáradá Tilaka*: "There goes the maid of Gurjara, blooming as with perpetual youth, having eyes like the *chakora*, of the complexion of the yellow *rochaná*, and a voice musical as that of the parrot. She wears anklets of silver, large earrings set with pearls, and her bodice is buttoned below the breast with gems." Wilson's Hindu Theatre, II. 354.

† Taittiriya Brâhmana, III. 668.

‡ Wilson's Hindu Theatre, II. 85.

§ Ibid. I. 165.

d indeed is, very largely employed, and seeing that it is cheap, and the Uriyás are particularly successful in producing it very superior description, rivalling silver in colour and brightness, it was probably also used in the fabrication of mirrors. word *kácha* for glass occurs in works considerably over two thousand years old, and seeing that the Singhalese, who borrowed all the arts of civilized life from the Hindus, make mention, in the *Dipowansa*, of a "glass pinnacle" placed on the top of the Ruanawellé dagoba by Suddaitissa, brother of Dutugaimuna, in the second century before Christ, and of a "glass mirror," in the third century B. C.,* and Pliny describes the glass of India being superior to all others from the circumstance of its being made of pounded crystal (Lib. XXXVI. c. 66), it would not, I fancy, be presumptuous to believe, that it was, in ancient times, used in India in the formation of looking-glasses; but I have nothing to show that mercury was used in fixing the foil on it. The looking-glasses used in the decoration of the marble bath in the palace at Agra, were foiled with a film of lead and tin poured in a melted state in large glass globes which were afterwards broken to form small mirrors. This mode of foiling is still in common practice in many parts of India. A counterpart of the mirror shown in the woodcut occurs in the garden scene at Sánchi. A female figure from Bhuvanes'vara, in the Museum of the Asiatic Society of Bengal, No. 806, is seen holding a circular convex mirror by a cross strap on its back. The handled mirror shown in the woodcut is, in appearance, very like the looking-glasses of the ancient Egyptian ladies. In the finer specimens of such articles the handles were probably carved as in Egypt, or ornamented with metallic mountings, but I have met with no such specimen.

The most prominent characteristic of the Indian mode of living has always been extreme simplicity. It is not remarkable, therefore, that there should be wanting traces of any great variety of furniture and domestic utensils among them. The four-poster was probably never known, and of almirahs, chests-of-drawers, and the like, there are no names in the Sanskrit language. The bedstead of the ancient Uriyás was ordinarily like the ancient Egyptian and modern Indian charpoy—a rope matting stretched on a simple frame of wood supported on four legs. For men of consequence and wealth, the matting was re-placed by tape, (*pálang*), or boards, (*takhtaposh*), the frame-work set off with mouldings and carved work, and the legs cut into various shapes. According to the *Brihat Saṁhitá*, which dates from the middle of the sixth century, the woods most esteemed for bedsteads were those of the *Asana* (ásan, *Pentaptera tomentosa*), *Syandana* (*Dalbergia ougeinensis*), *Chandana* (sandal wood, *Pterocarpus santalinus*), *Haridra* (*Morus ferrea*), *Suradáru* (deodar pine, *Pinus deodara*), *Vetasi* (a kind of ebony, *Diospyros glutinosa*), *Sála* (*Shorea robusta*), *Kásmari* (gambhár, *Gmelina arborea*), *Anjana* (*Mesua ferrea*), *Padmaka* (?) *Sáka* (teak, *Tectona grandis*), and *Sárapá* (ásu, *Dalbergia sisu*).† These include some of the best timber-producing trees of India; the wood of most of these trees is hard, close-grained, susceptible of a good polish, and in every way well adapted for cabinet work. The value of sandal, ebony, teak, sisu and gambhár for such purposes is too well known to need iteration; the last is particularly esteemed for the fabrication of the sounding-boards of musical instruments. It is worthy of note, however, that the list does not include the toon, which now-a-days is so extensively employed in furniture-making. The Silpa Sástra and some of the Puránas give detailed directions for felling these trees at particular seasons when the circulation of the sap has stopped, and for seasoning the wood afterwards so as to prevent unequal contractions and cracks in drying. Trees, which have been struck by lightning, or knocked down by inundations, storms or elephants, or which have fallen towards the south side, as well as those which grow on burial, burning or consecrated grounds, or at the confluence of large rivers, or by the road-side, also those which have withered tops, or an entanglement of heavy creepers on them, or bear thorns, or are the receptacles of many honey-combs and birds' nests, are reckoned unfit for the fabrication of bedsteads, as they are inauspicious, and are sure to bring on misfortune, disease and death.‡ Some of the woods commended are supposed to be most propitious when used singly, such as the gambhár, the ásan, the sisu and the sandal; others may be used singly or jointly, such as the teak and the saál, and the haridra and the kadamba; but the *Dalbergia ougeinensis* and the mango should never be used separately; the last may be used for the legs of bedsteads, but the frame-work should be of some stronger wood. The sandal wood is good enough by itself; but it is most highly prized when

Furniture and Domestic Utensils. Bedsteads.

No. 26.

No. 27.

* Tennent's Ceylon, I. p. 454.

† अजनश्चम्पकश्चैव तरिदरुसुरदारुसिन्धुकीशाम्बा।
काञ्चनपुन्नागाका वा शिंशपा च शुभा॥ बृ० सं० ९।

Brihat Saṁhitá, p. 393.

‡ अजनमजातनिम्बखलियाविता अधुविपरुक्षतभिन्नधना।
सेन्द्रमजातपक्षिभ्रमरश्वभिरन्ध्रा॥ २॥
कण्टकिनो वा ये गुल्मैर्वा तरोरुपरोहिता ये च।
सुरभवनजाश्च ये शुभा ये चापरमात्मादिकपतिताः॥ ४॥

Brihat Saṁhitá, p. 399.

mounted with gold and jewels.* But the best of all materials for bedsteads, according to the *Brihat Sanhitá*, is ivory. It should be used solid for the legs, and in thin plates for in-laying on the frame-work which should be of some choice wood. In selecting ivory about two thicknesses at the root of the tusk, which is hollow, should be rejected, if the animal from which it is taken come from the plain; but if it be a mountain grazer, somewhat less.† Great stress is also laid on the venation of the ivory. If the figures formed by the venation be of auspicious objects, the substance is good, otherwise it should be rejected. In the case of wood venation is approved, but large knots, hollows, and perforations by worms or insects, are strongly condemned, and detailed descriptions are given of the different kinds of misfortune which await the unfortunate wight who happens to sleep on a bedstead with knots in the end, in the shaft, in the globular central bulging, or in the top of its legs. The frame-work, according to the authority quoted, should have mouldings above and below, or be carved in various ornamental figures, or inlaid with gold, ivory and precious stones.

The standard measure for carpenter's work is the *angula*, or finger's breadth of eight barley corns divested of their husk, and laid side by side. This finger would be all but exactly equal to an inch; practically native carpenters, both in Bengal and the North Western Provinces, take the English inch to be equal to eight barley corns or *jaos*. Of this scale, the royal bed should measure a hundred, that is eight feet and four inches in length. For princes, a length of ninety inches, or seven feet six inches, is held sufficient. The prime minister comes in for eighty-four inches, the commander-in-chief for seventy-eight, and the high priest for seventy-two.‡ The rule as laid down is imperative; but I fancy the author intended some exceptions, otherwise His Grace the Hindu Archbishop, who happened to be somewhat of a grenadier in height and of Falstaffian proportions, would have made a sad tiger of it in his bed of barely six feet, unless he got over it by a special dispensation. The breadths of these several bedsteads measured three-fourths of the length, that is four feet six inches to six feet, and the height one-fourth, or one foot six inches to two feet one inch.§ Nothing has been said in the *Brihat Sanhitá* about the size of bedsteads for ordinary people, but it is to be presumed that its measure was not subject to any sliding scale.

No. 28.

As none of the bedsteads carved on the temples is of natural size, it is impossible to ascertain how far the rules of the *Brihat Sanhitá*, as regards this class of furniture were respected in practice. The breadth of the bedsteads seen, as far as I can guess, is about three-fourths of the length, but the height is not always exactly one-fourth of the length, or even near it. The principal causes of diversity however are the legs. Unlike the North Indian charpoy, whose legs are almost invariably of the same shape, the Uriyá bedsteads display legs of at least a score of different fanciful shapes quite unlike each other, some of them very similar to European designs of the present day, or such as may be copied to advantage. The woodcuts Nos. 26 to 30, exhibit some of the typical forms, but they are by no means the most select. They were copied as they were met with without careful comparison and selection; but such as they are they will most likely prove interesting. Woodcut No. 26, from Muktesvara, exhibits a very simple form with a plain border and legs, carved like lion's paws. No. 27, from the same locality, is remarkable for the manner in which the lion paws are fixed to the platform, not at the angles as usual, but considerably within the borders. No. 28, from the Great Tower, has very chastely designed legs, and the border of the platform is set off with a complicated series of mouldings. The legs of No. 29, from the same place, are somewhat like those of the last, but its platform has a bevelled edge and no moulding.

No. 29.

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* केवलघनसारचितं काष्ठमयं विधिवरं अयत्नं ।
अथवापि वर्ज्यं विवरैरपि पूर्णं सुषिरं सुषिरं ॥
Brihat Sanhitá, p. 401.

† गजदन्तः सर्वेषां प्रशस्यते यत्नतो ग्रहीतव्यः ।
आर्द्रोत्पाटितमिति जदन्तेन प्रकल्पेन ॥ १८ ॥
दन्तस्य मूलपरिधि विहाय शेषाणि कल्पयेदर्च ।
अधिकमपूपधराणां न्यूनं निर्धारिणां विद्यात् ॥ १९ ॥
Brihat Sanhitá, p. 401.

‡ कर्कटकुलपालयुवराजानां गुरोः परिमाणं ।
षट्त्रिंशत्सप्ततिरशीतिः शतं च सप्तोत्तरं तेषां ॥ ४ ॥
अष्टौ चतुरश्च षडश्च द्वादशैव विषदशैव च ।
षण्णवतिश्च चतुर्भिर्युक्ता शयनानि ते ॥ ५ ॥
Brihat Sanhitá, p. 399.

The ordinary angula is much less than an inch, twenty-four of it going to a cubit, or a foot and a half. If that measure be accepted the royal bedstead would be reduced to six feet, and that of the high priest to a little over four feet.

§ दैर्घ्यात्तुर्यांशसमः पादोच्छ्रायः शयुक्तिरिष्टः ॥
Brihat Sanhitá, p. 400.

No. 30.

Before it are seen a footstool with turned legs, and a curiously shaped vessel which I take to be a spittoon—two articles of frequent occurence as accessories to bedsteads. To a nation so inordinately addicted to chewing betel leaves, the spittoon is a most indispensible article of furniture, and in groups and court scenes, it often occurs in the hand of an attendant. The footstool when placed besides a bedstead served the purposes of a step for ascending on the bed, but it was also used as a stand for the betel box, drinking cups, water carafes, or flagons for wine. Woodcut No. 30, from the Great Tower, exhibits the richest bedstead I have seen in Orissan sculpture. It is mounted on an elaborately carved dais, and has very pretty legs of a square pattern, the like of which are very common in use in the present day. On one side of the bedstead is attached a semi-circular head-piece, designed to prevent the pillow from rolling over. The bedding (Sanskrit *talpa*) appears to have been stuffed, and the stuffing kept in its place by tufting. There was a large thick pillow on its upper side, but my artist forgot to copy it. From a slightly projecting mark under the frame, I fancy that such bedsteads were sometimes provided with secret recesses for the deposit of valuables and jewellery, as is still the case in some parts of the country. The bedsteads were used both for sleeping, and as ottomans or sofas.

Thrones.

The throne designed by Phidias for his renowned Olympian Jupiter was a large, high-backed arm-chair, elaborately carved, and sumptuously decorated, but still a chair, or a seat for one person, as the word θρόνος originally meant in Greek, in contradistinction to the κλίνη or couch for holding two or more persons, and the Egyptian thrones as preserved in sculptures and paintings are all huge chairs of some kind or other. The Indian throne differed entirely from these. It was founded on the model of the *takhtaposh* or bedstead, and was distinguished from it only by its mountings and decorations. According to the *Yukti-kalpa-taru* two sizes were common, one eight cubits square and four cubits high, and the other four cubits square and two cubits high. The former was called *Rájapátra*, and the latter *Rájásana*. The angles of the square, however, were not always left entire, and by the way in which they were cut off, the seat became six, eight, or ten-sided. The great height of the seat necessitated a flight of steps in front, but whether the steps extended to the whole length of a side, or only covered a portion of it, I cannot ascertain. Around the platform, there was a railing, but there is nothing to show that there was any raised back to lean upon: probably there was none, as the large pillow or *takiyá*, which formed an important element of the seat, rendered it superfluous. The name of the throne, *Sinhásana*, is supposed to have been derived from the images of lions (*Sinha*), which originally formed its supports, but the secondary meaning of a state-chair or throne, soon set aside the derivative meaning of a "lion seat," and such solecistic words as *Padma-sinhásana*, "lotus-lion-seat," *Gaja-sinhásana*, "elephant-Lion-seat," like the Yankee "neck-handkerchief," got into currency from a very early time. The objects ordinarily selected for the decoration of the legs were images of lotuses, conch shells, elephants, geese, lions, pitchers, deer and horses. The thrones were named differently according to the forms in which the legs were carved. Thus a throne made of gambhár wood with mountings of gold and rubies, having the sides festooned with carvings of lotus flowers, and the feet shaped like lotus buds, was named the "lotus throne." It had a lining of scarlet cloth, and for supports of the frame-work eight to twelve human figures, each twelve fingers long. A throne made of the abovenamed wood with silver and crystal mountings, white lining, and carvings of shells on the frame and the feet, was called the "conch-shell throne," *Sankha sinhásana*. It had twenty-seven figure supports. A throne made of jack wood, with gold, amethyst, coral and lapishazuli mountings, scarlet cloth lining, and carvings of lines of elephants on the frame, and of elephant heads at the feet, was called an "elephant throne." In the same way, the "goose throne," *(Hansa sinhásana)*, was so-called from having figures of geese carved on the frame and on the feet. It was made of sála wood, mounted with gold, topazes and agates, and lined with yellow cloth. It had twenty-one human figures for supports. The "lion throne" was made of sandal wood, mounted with gold, diamonds, mother-o-pearls, and lined with white cloth. It had, as its name implies, carvings of elephants on the frame and on the feet, and twenty-one human figures for supports. The "pitcher throne," *(Ghata sinhásana)* was made of champaka wood, and mounted with gold and emeralds; it had lines of pitchers carved on the frame, lotus buds on the feet, and blue cloth for lining. Its figured supports numbered twenty-two. When the throne happened to be made of Nima wood *(Melea azadirachta)*, mounted with gold and sapphires, carved with lines of deer on the frame, and deer heads on the feet, and lined with blue cloth, it was called a "deer throne," *(Mriga sinhásana)*. And when it happened to be made of the Mesua ferrea wood, mounted with gold and diverse kinds of jewels, lined with various coloured cloth, and carved with figures of horses, and horses' heads at the feet, it was called a "horse throne," *(Haya sinhásana)*. It had seventy-four human figures for supports. Besides these the Garuda throne, *(Garudásana)*, for Vishnu, the Bull throne, *(Brishásana)*, for Síva, and the Peacock throne for Kártikeya, are frequently mentioned. But I have seen none of these in sculpture. A plain *takhta*

pooh with carved legs, and moulded frames, is what is most common, and carvings of animals and human figures rather exceptions than otherwise. Even the two large thrones of Jagannátha in the Puri and the Gundichá temples, are perfectly plain and uncarved. It should be added, however, that it is possible that the structures which I have taken for *sinhásanas* or thrones were intended only for *pithas* or ottoman seats and not thrones.

Sofas, Chairs, Benches, &c.

Of ottomans, five kinds are described in books; the first measuring three feet by one foot six inches, with a height of nine inches, called *Sukhásana*; the second, six feet by three, with a height of one foot six inches, called *Jayásana*; the third, nine feet by four feet six inches, with a height of two feet three inches, called *Subhásana*; the fourth, twelve feet by six, with a height of three feet, called *Sidhyásana*; and fifth, fifteen feet by seven feet six inches, with a height of three feet nine inches, called *Sampatásana*. Others, called *Janaka, Rajapitha, Kelipitha* and *Anyapitha*, are also occasionally mentioned. These were made, according to choice, of metal, stone or wood, and carved into various shapes. The metals, gold, silver, copper, and brass, were most esteemed, and iron condemned, except for purposes of incantations. Of stones, the gritty sandstone alone was condemned, and the other kinds recommended with the proviso, that the colour of the stone should correspond with that of the planet which presided for the time being on the destiny of the person who was to use the seat; thus when a man happened to be under the influence of Saturn, he had to use a stone seat of a blue colour; but if Venus happened to be the presiding planet, a bright yellow stone was the most appropriate. Crystal formed an exception to this rule, and was reckoned fit for use at all times. As regards wood, the mango, the jáman, the kadamba, and all very light woods, were, as a matter of course, held unfit, as also all very heavy, knotty wood with irregular veins. The most appropriate woods were the sandal, gambhára, sála, sisu, ebony, teak, bakula, &c. Seats of these various descriptions are frequently met with in sculpture. A very good specimen of the first kind of sofa occurs in the second compartment of the Amarávati stone now in the Museum of the Asiatic Society, where it is provided with corner posts and a tester frame, and is being carried about on the shoulders of men in a procession. Images of gods and Hindu bridegrooms are to this day carried about in sedans of this description, and they are known under the old name of *Sukhásana*. Their short height makes them peculiarly fitted for this purpose. The other kinds were intended to be kept as fixtures, *i. e.*, not much moved about. In sculpture the ends of their legs are frequently carved into the form of lion's paws, or eagle's claws, and the shafts of the legs are sometimes, but not often, shaped like the legs of those animals. Cane morás are also frequently met with, shaped very much in the same way as now (Illustration No. 164). A variety of it with a raised back is shown in Woodcut No. 31, taken, like the last named Illustration, from one of Mr. Fergusson's plates of Amarávati sculptures. Seats similar to it are common enough in the North Western Provinces, though the requirements of Europeans have caused a change in the form of the back-rest. That they were common in former days is evident from a verse in Kálidása's *Kumára Sambhava*, where the mountain-king Himálaya is described to have offered such seats to the seven sages, who came with the proposal of marriage of his daughter Umá with Mahádeva.* At a much earlier period, we find in the Rámáyana and the Mahábhárata, and even in the Rig Veda, seats or chairs of gold described as invariable accompaniments of royalty. Thus Apamanyot, "the grandson of the waters," in the last named work, is pourtrayed as "of golden form, of golden aspect, of golden hue, and shining, seated on a seat of gold."† The mention of carpenters in that work‡ implies the existence of wooden furniture, and beds and chairs and stools would be the most probable articles of that description that would be turned out by such artizans; for had they been employed, as has been supposed by some, in the fabrication of only cars and waggons, they would have been named *Rathakáras*, and not *Sútradháras* or *Tákshakas*. In the time of Manu's Laws, the demand for cabinet-ware was sufficiently brisk to render the establishment of a distinct class or caste of men necessary for exclusive devotion to carpentry.

No. 31.

No. 32.

No. 33.

In Orissa, wooden stools and cane morás were, it seems, the ordinary form of raised seats. The morá, is identically of the same shape as is common now. Wooden stools appear under different forms. Woodcut No. 34 exhibits a well-finished specimen: it occurs repeatedly on the Great Tower. But the most remarkable among the stools are those which are mounted on crossed legs very much like the folding camp-stools of the present day (woodcuts Nos. 33 and 34); though, whether they were so made as to fold or not, it is of course impossible now to determine. Fold-stools like these are not unfrequently represented in the illuminations of mediæval European manuscripts, and formerly when a bishop was required to officiate in any but his own cathedral church where his throne was erected, a folding stool was placed

No. 34.

* Canto VI., v., 44.

† Wilson's Rig Veda, II., 301.

‡ Ibid I., 162, 175, IV., 85.

in the church, and he frequently carried one with him in his journeys. Among the ancient Egyptians Assyrians, they seem to have been very common, as both Wilkinson and Layard have figured a great variety of . In Orissa, they occur both on the Great Tower, and on the Temple of Muktesvara. Occasionally these folding were used as tables, and on the Great Tower, one may be seen holding either chessmen, or dice, or a roll of paper, with two persons seated on the opposite sides. (Illustration No. 24.) In the Temple of Muktesvara, it is used as a book-stand.

Of benches and chairs with backs and arm-rests, no specimens have been seen among Bhuvanesvara sculptures, but at Amarávati long benches, with high backs of different designs, not unoften of the Buddhist rail pattern, are common. Some of them have arm-rests. Woodcut No. 35, represents a very common form; it has well-carved and turned legs, buttoned seat, and a sloping back of carved work. Woodcut No. 36, has arm-rests with rounded tops, the back being made of a single wavy bar without any intermediate support. These were used sometimes with, and sometimes without, cushions and pillows. The last had a footstool of a rich pattern in front, which is shown below under a separate head (No. 42.)

No. 35.

Chairs with or without arm-rests, are likewise frequently met with, and of designs which for their time were certainly remarkable, though by no means displaying the taste, elegance, and richness, which characterised ancient Egyptian and Assyrian furniture. For easy reference, a few of these, like the benches, have been copied on the margin from Mr. Fergusson's "Tree and Serpent Worship," but so delineated as to show their character and perspective more fully than can be perceived in the positions they occupy in Mr. Fergusson's plates. Woodcut No. 37 shows a form which occurs repeatedly as a repository for some sacred object, or a throne for a royal or distinguished personage. Its seat is of about the same height as that of an ordinary chair, so that one can sit on it while resting his feet on the ground; its sides

No. 36.

and the back are protected by rails, strengthened by a double line of ornamented cross bars. Its arm-rests, seat-frame and the bar on the top of the back are all neatly carved, and the last terminates on each side in an alligator head, an ornament which under the name of *makara-mukha* is of frequent occurrence in Indian sculpture and carved work. The legs of the chair are formed by doubling the leg of the Tukhtaposh, No. 29, with an intervening ribbed globe. There is nothing to show how the seat was formed, but from traces of cushions and pillows, I think it was bourded. No. 38, is as heavy and primitive as the last, but it has no arm-rest and its back is low. In its general character, No. 39 belongs to the same class with the preceding two; but there is more art and finish in its details. The legs are slender, well-turned, and on the whole as good as those of ordinary chairs of the present day. The ends of the top bar of the back projects far out, have the usual makara head terminals, and are supported by figures of

No. 37

rampant lions; the fore ends of the arm-rests bend out laterally, and have similar terminals and supports, and the railing is light and chaste. No. 40 belongs to a different class, and resembles a modern chair much more closely than the preceding. Its legs are turned, carved, and finished much more carefully, the back and arm-rests are light and comfortable, and the whole has a modern look about it. No. 41 looks like a dwarf chair; the construction of its reclining arched back is peculiar, and its seat is semicircular behind, but in its construction there is very little to indicate its old primitive character. The legs are particularly worthy of notice. Joiner's art seems to have made sufficient progress at the time these chairs were made, and that at the lowest computation about two thousand years ago, to enable the carpenters to fix the legs with sufficient firmness by tenon and mortise joints, to dispense with the necessity of cross bars at the lower end—a

No. 38.

provision often found unavoidable for the sake of strength in ill-made furniture of the present day. The fact of such chairs and benches having been made for ordinary use, indicates a much higher state of civilization, than could be assumed if Mr. Fergusson's theory of the nude figures, who frequently occupy them, being of the so-called Dasyu, or aboriginal, race, be accepted. As already stated, these chairs were most likely fitted with stuffed cushions, as they are not unfrequently provided with pillows near the back; but in the absence of colour and details, it is difficult to make out how they were set off.

Mode of sitting.

The ordinary mode of sitting on ottomans in saloons in the company of friends, or on ceremonial occasions, was an erect one with the legs crossed; but when at ease, the reclining position with one arm thrown over the *takiá* was preferred. This latter was also the practice of the Romans, who sat reclined

supported by the left elbow, "et cubito remanete presso."* On stools, chairs, and benches, the most common [illegible] to sit with one leg hanging and the other placed on the opposite thigh. Sometimes [illegible] legs were crossed; at others, both the legs were allowed to hang in the European style, [illegible] feet resting on low stools; and this was evidently reckoned by far the most dignified [illegible] of sitting; for figures of gods are generally so seated; they also occur with one leg hanging and the other folded, but never on the ground, or on a cushion with the legs crossed, as is usual with men in the present day. That persons of rank also adopted the same style, is more than probable, as we find Kaikeyí in the Rámáyana—

No. 39.

"When she saw her son, so long away,
Returning after many a day,
And from her golden seat in joy,
Sprang forward to her darling boy."†

No. 40.

Other instances of the same description may be easily multiplied. When men of rank are represented seated on sofas, they are attended by servants holding chauris and an umbrella; but in zenana scenes the attendants bear betel boxes and palm-leaf fans. The ordinary attendant in such cases is a pot-bellied, big-breasted, elderly story-teller, seated in front. Sometimes female musicians and songstresses are also delineated. The mistress generally sits cross-legged, occasionally having in her hand a flat, small, circular mirror with a long projecting handle, a requisite of female toilet which seems to have been a great favourite with ancient Indian belles, and is frequently alluded to in old Sanskrit works.

No. 41.

Footstools.

The footstool, like the ὑποπόδιον of the Greeks, and the *scabellum* of the Romans, was an important article of furniture in Indian households, and frequent mention of it is made in ancient works. For gods and goddesses the most appropriate footstool was a full-blown lotus. It had a charming effect in setting off a piece of sculpture, and typified a most elegant poetical idea. For such personages seats of lotus flowers were not uncommon. For obvious physical reasons, such a style of depicting footstools could not be very congruous for human beings; and yet for the setting off to advantage of seated figures, footstools of some kind or other were absolutely required. Accordingly, we see a great number of sculptured footstools of various designs and patterns. Two of these are shown on the margin. (Woodcuts Nos. 42 and 43.)

No. 42.

No. 43.

They are as closely like modern English footstools as can well be imagined. The first is from Amarávatí, and the second, from Bhuvanes'vara. The stool shown in Woodcut No. 29, is a form of which counterparts, under the name of *jalachauki*, occur in almost every Bengali house. At s'ráddhas and marriages, such stools invariably form parts of the consecrated gifts. The curious reader will notice many other forms, some of elaborate workmanship, in Mr. Fergusson's work on Tree and Serpent Worship.

Teapoys.

As stands for betel boxes, drinking cups and the like, the first kind of footstool, (Woodcut No. 29) was, as already described, generally used, but it would seem from some bas-reliefs on the Bhuvanes'vara temples, that another kind of stand was preferred for such purposes in rich houses. It resembled very closely the modern teapoy, but without the characteristic three legs, it being fixed in a thick heavy carved block, which gave it much greater firmness on the ground than modern teapoys can claim. The stems of all the specimens were carved into a series of balls fixed upon each other, or formed into a twisted flute, and the tops carved in various designs. Woodcut No. 44 exhibits a plain specimen, and No. 45 a rich one, both taken from the Great Tower; the latter had a betel box on its top, but in such a decayed state that no trustworthy drawing could be made of it.

No. 44.

No. 45.

* Hor. L. Od. XXII., 8.

† Griffith's Translation, II., 389.

not a climate as that of India, a fan is an absolute necessity, and it has been in use from a very archaic period. It does not seem, however, to have, in early times, attained any great excellence in its formation. In sculpture, it always appears as a circular, or an oval, disk of some light material, such as palm-leaf or matting, mounted on a long slender handle, or provided with a haft on one side of the rim, so closely similar to what is manufactured in the present day, that the specimens shown on the margin, (Woodcuts Nos. 46, 47, 48), copied from originals on the Great Tower, may well be taken for modern articles. In Sanskrit works, fans of cloth, peacock's feathers, cane, bamboo, and other articles, are frequently mentioned; but everywhere pre-eminence is assigned to the well known palm, *Borassus flabelliformis*. In treatises on medicine some fans are said to overcome phlegm, others bile, and others heat; thus the *Rájavallabha*, quoted in the *Sabdakalpadruma* of Rájá Rádhákánta Deva: "The palm-leaf fan overcomes disturbances of all the three humours, and is light and agreeable; the bamboo fan causes heat and irritability, and promotes inordinate secretion of the airy and the bilious humours; the cane, the cloth, and the peacock feather fans, overcome disturbances of the three humours; the hair fan is invigorating, &c."* According to some practitioners, the palm-leaf fan promotes phlegm, and for patients suffering from diseases due to an excess of phlegm, a cloth fan, or palm-leaf fan covered with cloth, is generally recommended.

No. 46.

No. 47.

No. 48.

Umbrella.

The umbrella and the chámara are represented very largely, but in no great variety. As insignia of royalty they were held in greater estimation than even the crown; and for goddesses, saints, and men of consequence, they are rarely forgotten. "In Europe in the present day, the umbrella, though a highly useful article as a *parapluie* or a *parasol*, carries with it an idea of effeminacy. In ancient times *ombrellino* was held by Aristophanes as a lady's toy, and the Romans assigned it to their gentle women, as an article befitting their delicacy. The Greeks, nevertheless, used it as a mystic symbol in some of their sacred festivals, and the Romans introduced the custom of hanging an umbrella in the basilican churches as a part of the insignia of office of the judge sitting in the basilica. It is said that "on the judgment hall being turned into a church, the umbrella remained, and in fact occupied the place of the canopy over thrones and the like," and Boaïan, an Italian Herald, says, "that a vermilion umbrella in a field argent symbolises dominion."† It is also believed that the cardinal's hat is a modification of the umbrella in the basilican churches. Among the ancient Egyptians, the umbrella carried with it a mark of distinction, and persons of quality alone could use it. The Assyrians reserved it for royal personages only. "The umbrella or parasol," says Layard, "that emblem of royalty so universally adopted by Eastern nations, was generally carried over the king in time of peace, and sometimes even in war. In shape it resembled very closely those now in common use; but it is always seen open in the sculptures. It was edged with tassels, and was usually ornamented at the top by a flower or some other ornament. On the later bas-reliefs a long piece of embroidered linen, or silk, falling from one side like a curtain appears to screen the king completely from the sun. The parasol was reserved exclusively for the monarch, and is never represented as borne over any other person."‡ The Moslim sovereigns of India were likewise very particular about the use of the umbrella by other than royal personages. But the Indians, like the Egyptians, were not so exclusive. They permitted the *chátrá* to be used by other than kings, though they entertained the idea that the right to bear an umbrella, belonged chiefly to persons of considerable distinction. The king is *par excellence* the *Chhatrapati*, or "the Lord of the Umbrella," and the title is even now held in higher estimation than that of *Rájá* or *Mahárájá*. The king of Burmah is proud to call himself "the Lord of Twenty-four Umbrellas," and the Emperor of China carries that number of parasols even to his hunting field. The Mahábhárata makes frequent mention of the umbrella as a mark of royal dignity, and, in the *Dánadharma* section, enjoins the gift of white umbrellas having a hundred ribs, as a religious act calculated to ensure the donor a long residence in the heaven of Indra, respected by gods, heavenly choristers and Bráhmans.§ Páṇini mentions the *chhatra*, and gives its derivation (VI., 4, 97), and the Smritikáras, both ancient and modern, all follow the Mahábhárata in praising the gift of the umbrella, as an act of great merit. According to the *Yuktikalpataru* umbrellas are of two kinds, special or royal, and ordinary. The latter is again of two kinds, according as it is handled—*sadanda*, or handleless—*nirdanda*.‖ The former was adapted to open

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* लालजमनुषा। चित्रपमनस्। अपुनस्च। चंशजन्यमनुषः। पत्रजं, पुष्पजं, वानस्पतिकारिष्ठ च वेणवस्तूरपुच्छजमनुषः। चिरोपनाभिजं। वास्यजमनुषा। मेघस्करजं।

† Patents of inventions, Abridgments of Specifications relating to Umbrellas, Parasols and Walking Sticks, 1858.

‡ Layard's Nineveh, II., 327.

§ अथ चि भरतश्रेष्ठ या प्रदद्यादु द्विजातये।
शुभे मासकाले च सै म प्रेत्य सुखमेधते॥
स शक्रलोके सहसि पूज्यमानो द्विजातिभिः।
चतुस्सहस्राणि वसति देवेषु भरतर्षभ॥

‖ त्रिमेघपात्र सामान्य, दण्डस्य द्विविधा मिद्दा।
राज्ञश्चत्रं त्रिमेघाढ्यं सामान्यं दण्डमुच्यते॥

and shut at pleasure. Its principal parts were the stem, sliding frame, ribs, threads, cloth, and pin. The stem of a well-made umbrella, should be in the present age four cubits long, the sliding frame two spans, the ribs three cubits, the cloth twice the length of the ribs. The pin, which supplies the place of the modern spring to lock the sliding fr[illegible] reckoned at eight fingers. These proportions, however, should, in the opinion of the author under notice, vary according [illegible] rank of the owner. Rules are also given by him for royal umbrellas of various kinds. An umbrella with the stem and frame of choice wood, and of ribs of selected bamboo, and thread and cloth of a red colour, is good for kings. It is called *Prasáda*. The *Pratápa* is made of a blue stem and cloth, with a golden top and hinge; it is the most appropriate for princes. If the stem and slide be made of sandal wood, and the threads and cloth be of a pure white colour, and the top be surmounted with a golden *kalasa* or knob, the umbrella would be most auspicious for kings. It is called *Kamakalasha*. The most important, however, was the one which was named *Navaláka*, and recommended to be used on great state occasions, such as coronations, royal marriages, &c. Its stem, sliding frame, ribs and lock pin, were made of pure gold; its cloth and strings of choice colour, and it was decorated with golden knobs, figures of decks and cars, and fringes of thirty-two strings of pearls, each formed of thirty-two beads. Its top used to be surmounted with a pure white brilliant, and the lower end of the stem with a ruby and a carnelian, and its most appropriate appendage was a tassel of yak tail, one cubit long. The Agni Purána (C. 224) does not enter into any great detail, but recommends other materials besides cloth for the construction of royal umbrellas. According to it, "it is conducive to the good of princes to have their umbrellas made of the feathers of geese, or of peacocks, or of parrots, or of herons *(baka)*; but they should not be made of feathers of various kinds mixed together. The colour of the umbrella, when intended for the use of Kshatriyas, should be white, and when for that of Brahmans, other than of that colour. Its handle should be made of a cane from three to eight joints in length." The Brihat Saṁhitá recommends the feathers of geese, fowl, peacocks, and cranes, *(sáras)*, as also new cloth, as the best materials for the covering of white umbrellas, the decorations to consist of pearl fringes, garlands and crystal mountings, the handle being of gold, six cubits long, and divided into seven or nine sections, and the area one-half the length of the handle. For crown-princes, queens, generalissimos and chief judges, the haft should be reduced half a cubit, and the area to be two and a half cubits. For ordinary people, the umbrella may be of cloth or peacock's feathers, according to choice, the shape being square, and the handle rounded.* The Woodcut in the margin, No. 49, represents the only kind of chhátá that has been met with in sculpture; it has two tassels of yak's tail for ornaments. The sliding frame is visible in some specimens, but not in so distinct a form as to enable one to make out its exact character. From Layard's drawings, it would seem that the Nineveh umbrella had a sliding frame.

No. 49.

The *chámara* or fly-flapper reckons next in importance to the umbrella among royal insignia. It is frequently referred to in Sanskrit works, and the *Yuktikalpataru* of Bhoja Rájá dwells on it at great length.

Chámara.

According to it, there were two classes of chámaras in use in former times, one "mountain-born," and the other "sea-born." "The former were made of the hair of cattle common on the Meru, the Himálaya, the Vindhya, the Kailása, the Malaya, the Udaya, the Asta and the Gandhamádana mountains. The chámara of the Meru mountain was of a deep yellow colour; that of the Himálaya, white; that of the Vindhya, white and dense; that from Kailása, black and white mixed; that from Malaya, white and yellow mixed; that from Udaya, blood-red; that from Asta, blue and white shades mixed; and that from Gandhamádana, sometimes black, and sometimes pale yellow."† Of these varieties, those which had long, light, bright and dense hair, were reckoned the best, and those which had short, heavy, discoloured and dull hair, were condemned as bad. The first set of qualities ensured to the owner of the chámaras possessing them, long life,

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* Brihat Saṁhitá, p. 377.

† [illegible]

...lour, fame and enduring prosperity, while the second set brought on shortness of life, disease, sorrow and death.* The ...orn chámaras are said to come from the seven Paurânic seas. The animals which yield them are believed to dwell in those ...d marine animals bite the bushy part off from their tails and cast them on the shore, where fortunate people collect them. Each sea has its own peculiar kind of chámara, and the author describes them in detail. He adds that the most characteristic quality of the mountain-born chámara, is the ease with which it burns when thrown on the fire, and the peculiar *sis sis* sound which it produces when burning. The sea-born chámara does not easily take fire, but when it does burn, it emits profuse, dense smoke, and produces a crackling sound like *chat chat*.† It is evident that by the mountain-born chámara the author refers to the tail hair of the Yak, Gour, Gayal and other bovine animals which continue even to this day to yield chámaras of various kinds; but what he means by sea-born chámaras, I cannot make out; and yet from the details of their colour, length, density and sound produced when burning, it is obvious that he alludes to some imported articles which he had seen. Of these several kinds of chámaras the Brihat Saṁhitá notices only the yak chaury, which, it says, is sometimes yellow, sometimes white, and sometimes black, the best being that which is white, glistening, soft, dense, beautiful, and enclosing only a few small tail bones.‡ Its handle may vary in length from a span to a cubit; it should be made of some choice wood, mounted with gold, silver, and jewels.‡ Of the handles appropriate for the various kinds of chámaras, the articles of which they should be made,—gold, silver, and the like;—the mountings they should have,—jewellery of various kinds;—their thickness and length with reference to the respective ranks of the persons for whom they are to be made, the author also gives elaborate descriptions; but they are not sufficiently interesting to be worth translating. The Smritis also describe various kinds of chámaras, and speak of the merit of presenting them to Bráhmans on particular occasions, but I shall forbear to quote from them, as it is impossible to identify in sculpture the different varieties mentioned by them. The article itself is frequently met with in sculpture, and represented as a mass of flowing hair mounted on a handle more or less ornamented. The woodcut in the margin (No. 50) shows the typical form, but the mass of hair of which it is formed is not always made of a uniform thickness. In some specimens, the hair is short, but thick-set and very bushy; in others it is long, flowing and light. The pellicles of the tail feathers of peacocks, and the crested tops of those feathers were also used in making chámaras, but I have not seen them delineated in sculpture, nor have I noticed any mention of horse-hair as a material for chámaras.

No. 50.

Domestic vessels, utensils, &c.

Of household vessels and utensils, the sculptures of Bhuvanes'vara represent but little. They are subjects which the domestic economy and the religious obligations of the Hindus, studiously drove to the back ground, and it is not to be expected that they would occupy any prominent position in sculptural decoration. Even in that great sanctuary of ancient art, the sacred land of Greece, where the taste of the people and the ingenuity of artists endowed every thing with the halo of beauty, the number and variety of domestic vessels to be seen in sculpture is extremely limited. There was, however, one exception, and it referred to the class which included vessels for fluids. In a country where drinking wine was prevalent and fashionable vases, and tazzas, and goblets could not but attain some eminence, and the exquisite perfection to which they attained, has hitherto claimed the highest meed of praise. In India even this class of vessels has not attained the distinction which they deserved. With the exception of the *kalasa* or jar, there is no vessel for fluid which is worthy of notice for the beauty of its form, or the elaboration and art in its finish. Even the kalasa as a domestic vessel has no claim to any æsthetic excellence. In sculpture, however, it has been treated with great taste and elegance. As the crowning member of temples, it is generally well conceived and elaborately finished, and the various forms it has assumed under different treatment are all remarkable for taste and beauty. On the temple of Yames'vara, to the west of the Great Tower of Bhuvanes'vara, there are at least fifty different varieties of kalasas, many of

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* अभिषेके नित्यं च यज्ञानां पौनिर्वचने ।
मेरौ हिमालये च जाते कैलासे मलये तथा ॥
उदयाद्रिरि चैव अस्ताद्रिपर्वते ।
एतेषु पैव पाशुल्यो भवन्ति वि ॥
साधा जातस्य जाते चामरेत्यभिधा स्मृति ।
चापोताः कनकादिका शिलिरो शुभाधला विपश्चाः ॥
कैलासाद्गिरिजः गिरा मलयजाः शुक्लाक्षणा पिङ्गलाः ।
चारुका उदधेरुद्भवजा श्यामोज्ज्वलाक्षिणः ॥
लघ्वा कोचम जन्मादर्शनजा श्यामसिताक्षाः ॥
दीर्घेः श्यामा च पैव सलघ्वा भवना तथा ।
मुक्ताधार दन्तेन चामराणां प्रतीक्षिताः ॥

यशसा मुक्ता चैव वैभवो मलिमाङ्गला ।
दीर्घायुषार दन्ते चामराणां प्रदीर्घिताः ॥
दीर्घे दोषमुपाति अपि मौलिविभागजं ।
अल्पे शारदकीर्णिता धने सुः स्थिरसम्पदः ॥
धने सर्वगुणदृष्टं मुक्तमुक्तमयपदः ।
विरले रोमलोकाश्च मलिनं सन्मलिनेन ॥
† अलले अलले चैव भावमेतद्विजानीयात् ।
अलले सुखदुःखे च दाहे निर्वाणमात्रके ॥
अलले चटचटेति सदाग्नौ धूममुद्गिरन् ।
चामराणां अधस्तिन्नेयं लघुदृष्टं ॥

‡ Brihat Saṁhitá, p. 378.

which can be placed besides Grecian and Roman vases without reflecting any discredit on the taste of their [illegible]. Illustration No. 151, from this temple, represents a typical figure; and its elegant outline and chaste ornamentation [illegible] doubtless commend it to the approbation of connoisseurs. Illustration No. 152 is from the top of the Great Tower [illegible] is also a typical specimen on the model of which most of the crowning kalasas of Bhuvanes'vara temples have been fashioned. Jars for the storage of water were formed on the same model, but they had no broad base to rest upon, and, in the majority of instances, their height did not exceed their breadth, and accordingly they looked dumpy. (Illustrations Nos. 27 and 28.)

Of smaller vessels for water, Illustration No. 153A shows a remarkable specimen from the Great Tower; it is a water carafe or goglet in which water was served out, or kept for ready use. In Calcutta, a vessel somewhat similar to it was in use until thirty years ago, when it went out of fashion. (Illustration No. 153B). It was made of metal, either brass or silver, and known under the name of *amriti* or the "nectar bottle," from which it would not be unreasonable to infer that it was likewise used for holding more potent fluids than water. In shape it was very much like a hock bottle, and it stood from nine to fourteen inches in height; it was capacious enough to hold from a pint to a quart and a half of fluid. It was set before guests, who poured out the fluid into a smaller vessel or lota for use. Illustrations Nos. 154, 155, 156 and 157 also represent vessels into which fluids were drawn from the kalasas or jars, and kept until required for use, when their contents had to be poured out into cups or goblets. They occupied the place of the modern lota, but differed from it in being provided with covers. From several illustrations in Mr. Fergusson's "Tree and Serpent Worship," it would seem that they were used largely as decanters for wine, and in this respect they occupied the same position in the domestic economy of the Hindus which the κρατῆρες, ἀρύταινα, ἀμφορεῖς and χοεῖς did in that of the Greeks, or the *simpulum* and *trulla* in that of the ancient Romans, the *kalasa* representing the mixing vase or κρατῆρ. Of cups or goblets for drinking wine, Illustrations Nos. 158 and 159 show typical specimens. They are common both at Bhuvanes'vara and Sánchí. This distinction of decanters and drinking cups is indicated in Sanskrit works, in which decanters, or vessels for serving out wine, *(madya-parivesha-pátra,)* are named severally *saraka* and *antarbhaga*, and the drinking cups *pánapátra, chasaka, pári*, and *párika*. The modern Hindi and Bengali *surái* is a corruption of the *saraka*, and the name is now applied to a goglet. The cup for drinking wine was made of a very small size, and the Tantras limit its capacity to two, three, or five tolas,* the largest containing barely two ounces, and, considering that the liquor drunk was generally raw spirit, it was the largest that would be convenient. It is worthy of note, however, that the largest was just of the same size as a modern English wine glass, and the smallest a liqueur glass. For curries, sherbets, and other articles of food and drink, cups were of course made of a larger size. One of them is shown in Illustration No. 160. It is remarkable as being four-sided, and not circular as cups usually are. Illustration No. 161 shows a large bowl such as is now used for milk, soup and other fluids drunk in large quantities. No. 162 is a large, handsome bowl designed for holding solid food; it occurs in the hand of Ganes'a in the Great Tower, and is represented holding a number of ball-shaped sweetmeats *(modaka)* which the elaphocephalic divinity is leisurely taking up with his trunk. The betel-box and spittoon have already been noticed. Water-pots with a spout on one side, *(Sk. bhringára)* are common in Bhuvanes'vara, and a vessel very like a tea-kettle appears at Sánchí. (Illustration No. 163.) It was used for sprinkling holy water before a sacred procession, even as the Gáru is in the present day. A's'valáyana recommends urns with spouts as appropriate for the sepulchre of relics of females.

Tangible evidence is wanting to show what these vessels were made of. The bulk of them, doubtless, were of baked clay, or terra cotta, such as are now so common in every part of India. In the Rig Veda, frequent mention is made of earthen cooking pots *(kapálas)*, and for the dressing of the *purodása* cake, the *Chhandoga-parisishta* recommends hand-made platters as purer than those turned on the potter's wheel.† The practice of using fresh pots on every separate occasion, a practice which was also observed by the Buddhists, and is noticed in the Mahávanso,‡ gave great importance to their manufacture. Manu, Parás'ara and others assigned to a particular mixed caste, the issue of a garland-maker *(málákára)* by a frail daughter of a blacksmith, the kumbhakáras,§ the special vocation of fashioning earthen pots. References are also not wanting to wheels for the formation, and kilns or furnaces for the baking, of such vessels. From descriptions accessible, it is probable that the old wheel did not differ from what we see in use in Egypt|| in former times, and what we are familiar with in the present day.

Clay, however, was not the only material in use for the fabrication of domestic vessels in ancient times. The Rig Veda alludes to golden cups; and silver, copper, brass and bronze, which were well known and used in the

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* मध्यमाधिमात्रमृद्भेदेन पञ्चधोक्तैः ।
चेतुमाणं प्रकर्षेणान्तिमपूर्व कुलपालिनी ॥

† आदर्शन तु पात्राणि यत्र तत्रान् विक्षिपेत् ।
पितरस्तत्र नाश्नन्ति दत्तमप्यनिति पञ्च ॥
कुलालचक्रपरिवर्तमाघूर्णं यत्कपालं भुवि ।
तद्वै रक्षःपरिषदं रक्षाम्यादि दैवित्रं भवेत् ॥ पाद्मसंहि ।

‡ Mahávanso, B. C. 161, Ch. XXIX. p. 170.

§ The Brahmavaivarta Purána raises their status by calling them the sons of Vis'wakarmá by a Súdrasí.

|| Wilkinson's Ancient Egyptians, III., p. 164.

ion of weapons, were, it is to be presumed, not neglected. The Sutras and the Mahábhárata, however, leave no t on the subject: they frequently refer to vessels of other than gold and clay. Tvashṭá, the Vulcan of the Hindu pantheon, was the most celebrated artificer of metallic arms, but the Ribhús greatly excelled him in the formation of sacrificial vessels of wood and metal, and on one occasion Tvashṭá is said to have sought to slay his rivals (IV. 33, 5, 6) and on another, "to have applauded their design, and admired the brilliant results of their skill."* In a mediæval work, the *Kálika Puráṇa*, plates made of gold, are described to remove excesses of the three humours, and promote the strength of vision; those of silver, favourable to vision, and inimical to bile, but calculated to increase the secretion of wind and phlegm; those of bronze, agreeable and intellectual, but favourable to endue excitement of blood and bile; those of brass, wind-generating, irritating, hot and heat and phlegm-destroying; those of magnetic iron, most beneficial in overcoming anasarca, jaundice and anæmia; those of other stones and clay are inauspicious; those of wood wholesome, but phlegm-generating; those of horn, wholesome invigorating and poison-destroying."† The *Yukticalpataru* recommends that drinking cups for royal personages should be made of gold, silver, crystal or glass ‡ and other authorities are equally precise on the subject.

Reference has already been made to the knowledge which the Hindus had of glass as a material for the fabrication of ornaments, but from a passage in the work above quoted, it appears that it was also used for drinking cups or tumblers, the physiological effect of drinking water from vessels of glass being described to be similar to that of vessels made of crystal.§ What this glass was made of, I cannot ascertain from any Sanskrit work, but according to the opinion of Pliny, already quoted (ante p. 101), it was made of pounded crystal, and was therefore superior to glass of all other countries. That this substance was the *lithia diaphanys* of the Greeks, there are many reasons to believe,‖ and Mr. Vincent, the editor of Arrian, says, "that clear or flint glass assumed its name from ὑαλος, crystal, is still more apparent from a passage of Diodor, Sic. Lib. ii., p. 128, ed. Wessel, where mention is made of both sorts, the factitious and native ὑαλος, as he writes it. The glass coffin of Alexander is called ὑαλος by Strabo."¶

There was most probably another substance, porcelain, which was to some extent used in the formation of drinking cups and other domestic vessels, for there is little reason to doubt that the Murrhine cups, for which such fabulous prices were paid, were made of oriental porcelain, which, according to the Periplus, was "brought down from the capital of Guzerat, Ozoné, (Ougein) to the port of Barygaza or Baroach." "All this," adds Vincent, "seems to confirm the opinion that it was porcelane procurable in India at the time, as it now is; and that it was brought into Egypt by the ships that went to India."** "Elsewhere," he says, "the mention of Carmina by Pliny, as the country where the murrhina were obtained, favors the supposition of procuring these vessels from India; for the communication of Carmina with Scinde and Guzerat is almost immediate, and certainly prior to the navigation from Egypt to that coast. But in Guzerat they were obtained, when the author of the Periplus was employed in that trade; and their arrival at the market of Baroach, from the interior of India, may induce us to suppose that they came into India from the north."

Another material which was used in the manufacture of domestic vessels was leather. In the time of the Rig Veda leather masaks for water were well known, and Indra is praised as piercing the rain-confining skins or masaks of the clouds.†† Bottles of the same material also were evidently in common use, for Agastya in his poison-neutralizing mantra, says, "I deposit the poison in the solar orb, like a leather bottle in the house of a vendor of spirits."‡‡ In the Laws of Manu, masaks for water are alluded to under the name of *driti*, and its peculiar form with the four feet left intact is pointed out.§§ Directions are also given for the purification of leather articles.‖‖ Other Smritis ordain that oleaginous articles preserved in leather bottles do not become impure by the contact of the impure cow-hide; and in the present day jars of that material are in extensive use in Bengal and the North-West Provinces for the storage of oil and ghi. In the latter place, leather bags are universally

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* Muir's Sanskrit Texts, V. p. 220.

† दोषघ्नदृष्टिदं पथ्यं नेत्रं भोजनभाजनं।
रौप्यं कफहरं चक्षुष्यं पित्तकृत् कटुपाकजम्।
कांस्यं वृष्यमृदं रूक्षं रक्तपित्तवमापहम्।
दैवतं वातलं दृष्टिमृदुत्वं क्लमिकारकम्।
पार्थिवं वातलं पित्तं श्लेष्मजं भेदनं परम्।
शोथघ्नमुदरं कण्डूं कामलापहमुत्तमम्।
लौहमेकगुणं पाके लोकानां शीतिवारणं।
दारुजन्तु विशेषेण वातदं श्लेष्महारि च।
पार्थं वातहरं पथ्यं दोषघ्नं विषघातनम्॥

‡ नस्य पात्रमथ पानभाजनेषु चषकं नृपेः।
कारयेत् राजतेनैव स्फाटिकं काचमेव च॥

§ आतपात्तु गतायस्य तदभावे यदो चितम्।
अधिकं शीतलं पात्रं स्फटिकेन घृतं।
काचेन रजतेनैव तथा वैदूर्यमस्य च॥

‖ Arrian's Periplus of the Erythræan Sea, II., Ap. p. 45.

¶ Ibid. II., Ap. p. 48.

** Ibid. II., Ap. p. 40.

†† Wilson's Rig Veda, II., 28.

‡‡ Ibid. II., 204.

§§ Manu, II., v. 99.

‖‖ Ibid. V., v. 109.

used for raising water from wells, and according to the law books of Sankha and Likhita,* that water is declared pure which is kept in old leather bottles. Atri is likewise of the same opinion, and adds that flowing water, and that which is raised by machinery, are not defiled. The use of such words, as *charmanda, charmapatti, váratra, chasa-bandha*, &c., in old Sanskrit works indicates that straps, bands and strings of leather were in common use, and sails were also made of leather or hide. No articles of the kind, however, have been seen at Bhuvanes'vara. In the boat scene at Sánchi, leather masaks are used for swimming,‡ and their counterparts may be seen in Layard's plates of Assyrian sculptures.§ Of leather bottles and jars no trace can be found in sculpture, but a remarkable article, probably of leather, occurs on an attendant on a lady of rank from Bhuvanes'vara now in the Museum of the Asiatic Society of Bengal; it is a courier bag of a check pattern with a flap, slung from his left shoulder. (Woodcut No. 51.) I have seen nothing of the kind in any other sculpture in India.

No. 51.

Of boxes, scrutaires and the like I have also seen nothing. The *Manjusá*, or trunk made of cane, is frequently referred to in Sanskrit works; but what it was like I cannot ascertain. Illustration No. 165, appears to me to be a specimen of the kind. It is an ornamented casket for jewellery or other toilet requisites, and was probably copied from a cane-made original. In Bengal, even to this day, the most important element of the trousseau is a small casket of wicker work with cloth lining and silver or kouri shell mountings, very much like the one under notice, and intended to hold pomades of bees-wax, redlead or *sindur*, combs, plaited hair strings, stibium, and other nicknacks of feminine use. The most important of these articles in the estimation of Bengali ladies is the redlead, because with it is associated their married condition. According to a verse in the *Márkanda Purána*, "no faithful wife who desires the longevity of her husband, should ever forego turmeric, saffron, redlead, stibium, boddice, betel leaf, auspicious ornaments, dressing of the hair, chignons, bangles, and earings."† But modern belief is that redlead and an iron bracelet are the only two things which no married women should be without for a moment, and the rest are ornaments which may or may not be put on according to choice. The redlead is used for marking one or more spots on the top of the forehead, just where the hair is parted along the median line. Formerly, paper stencils, representing elaborate floral devices, were in use for marking the forehead with sindur or sandal paste, and they accordingly found a prominent place in the dressing case, but, except for brides on the day of marriage, they are not thought of now.

On the Great Tower a scene represents churning, and the instrument delineated is identically the same with which we are now familiar, a churning stick, worked in a large earthen pan, with a twisted rope held in the two hands of a milk-maid. The stick is kept in situ by two rings attached to an adjoining post. (Illustration No. 166.) A kitchen scene at Sánchi¶ exhibits a winnowing fan, *kula*, a wooden pestle and morter, *okhli*, (both very like what is common now); a curry stone, *sila*, with feet and muller, and a board or table mounted on four tall legs used evidently for rolling bread, *chaki*. The grouping is thoroughly life-like and oriental. Adverting to it, General Cunningham, in his Bhilsa Topes, says: "This scene is one of the most curious and interesting of all the Sánchi bas-reliefs. Women only are employed in all the domestic occupations: in drawing water, in husking and winnowing the corn, and in the cooking of food. The last fact is noticed by Quintus Curtius, who, speaking of the Indian king, says: "Women prepare his food." The mortar and two-handed pestle are the same as those in use at the present day in India. The mortar *(okhli)* is exactly the same as the Greek τύπος, and the Roman *pila*; and the pestle *(musar)* is the same as the Greek κόπανον, and the Roman *pilum*. The primitive method of winnowing represented in the above scene is still used in India; and it recalls one of the blessings of the prophet promised to the children of Israel: "The oxen, likewise, and the young asses that eat the ground, shall it clean provender which hath been *winnowed with the shovel and with the fan*." Bishop Lowth reads, "winnowed with the *van* and the *sieve*." But *shovel* is the nearest descriptive word in English for the present winnowing-basket, which does not seem to differ, even in the slightest degree, from the ancient one represented in the bas-relief."**

Writing is not a subject which can be expected to be shown in sculptures, except in the form of inscriptions. There are, nevertheless, indications of both reading and writing in groups of human figures which are unmistakable. One in particular deserves special mention. It represents a youthful maiden standing under a tree and writing something with a reed pen on an oblong tablet. The figure is now in the Museum of the

Writing materials.

* आं० कूपस्थमम्भः अरिष्टमाहुः और्ध्वभर्धकरण्डरज्जुदृतम् । चर्मघटः । मरुत्रिणिनी ।

† चूर्णि मेवाञ्जिलोध्रं प्रवरिष्ठा मलीमलं ।
भर्त्तुर्भायुषि भारोषधा मन्नोद्यम जन्म ॥
ऋषिः ।

‡ Tree and Serpent Worship, plate XXXI.

§ The Monuments of Nineveh, plates XV and XVI.

¶ चरिका पुष्पमधेच सिन्दूरं कबरीं तथा ।
कायालक्तं ताम्बूलं भाङ्गं नदनं शुभं ॥
वेशभूषाविधिश्चैव कर्त्तव्यो नित्यं ।
भर्तुरायुष्यमिच्छद्भिः पुरुषैः सदिप्रिया ॥
Kás Khanda, Chap. IV.

** Bhilsa Topes, p. 206.

Asiatic Society, and a sketch of it is shown in Illustration No. 117. Looking to the practice, common among the Uriyás of the present day, of writing with an iron style on palm leaves, it might be said that the statue does not represent writing, but drawing. The practice, however, of writing with white chalk on black wooden tablets, or with ink on white tablets, which, among the grocers of Bengal and in the village schools of Northern India, is still universally prevalent, was well known in ancient India, and the tablet did then occupy, as it does now, the place of the modern European slate and the box wood tablets of ancient Greece, on which pupils practised the art of drawing with the *graphis* or the *penicillus*. Raghunandana, in his *Vyávahára Tattva*, quotes a verse from the *Sankhá* of Vyása, which says, "the first draft of a document should be written on a wooden tablet, or on the ground, and after correction of what is redundant and supplying what is defective, it should be engrossed on leaf, or other material, on which it is permanently to remain."* And there is no reason to doubt that the Uriyás were familiar with it. The practice of writing on the ground or on boards, is common now in every part of Orissa. The pen shown in the sculpture is a plain cylindrical rod with a pointed end, but without the flat cutting top so peculiar to the modern Uriyá style. For materials for pens, the *Yogini Tantra* condemns bamboo twigs and bronze styles as unfortunate. Copper styles are better as leading to wealth, but the gold is the best as the most auspicious; the reed pen (*nrinnala*) is, however, preferable as conducive to intelligence. References are also made to ornamental wood and brass as materials for pens, and they are required to be cylindrical and from eight to ten fingers long,† but without any flattened top, and the pen in the sculpture corresponds with this rule. It is worthy of note that Uriyá women of the present day are more proficient in reading and writing than their sisterhood in Bengal. Even the courtezans of Cuttack attach more importance to education than their representatives in Calcutta. When I visited the place two years ago, they had three schools for the education of their daughters, in the Bengali language, and those institutions were well attended. The like of them I have not seen in Bengal or the North-Western Provinces. The necessity for these schools arises from the circumstance of Bengali songs being held in great esteem by the higher classes of the people, and it being held *infra dignitate* on the part of dancing girls to sing other than Bengali songs. A similar feeling in Bengal makes the dancing girls think it a point of honor here always to sing Urdu songs, and accordingly to learn to read and write Urdu. I cannot venture to say if it is a feeling of that description that makes Italian songs most fashionable in the musical circles of Europe; but certain it is that in every one of these cases, that which is not easily understood, is preferred to what comes home to the admirers of music. Should the sculpture be taken for a representation of a lady engaged in drawing or painting, it would still be of great interest as an index to the social condition of the people, and a lithic proof of the descriptions which make Sitá, Ushá, Ratnávalí, and other ancient heroines proficient in painting likenesses.

Musical Instruments.

Looking to the number of works which have been written on the art of music by the Hindus, the success with which musical notes have been analysed, the different systems which have been adopted for the classification of the national airs and tunes, and the various kinds of instruments which have been noticed in ancient works, it is to be expected that lithic remains of at least some of the instruments of former times should be met with. Nor are they wanting at Sánchí, Amarávatí, and Bhuvanesvara. Scenes representing concerts are very common at all the three places, but the number and variety of instruments in use in those parties appear, however, to have been extremely limited. Harps of two kinds are shown at Sánchí and Amarávatí. (Illustrations Nos. 164 and 166.) But none are to be seen at Bhuvanesvara, and, indeed, no stringed instrument seems to have been in use there except the *Vipá*. (Illustration No. 167.) The Amarávatí harp is in appearance very like the ancient Egyptian instrument, but it was held on the lap in a horizontal position, whereas the latter when in use, was kept in an upright position on the ground, or on a stool. The Amarávatí guitar shown on the stone in the Museum of the Asiatic Society, has a sounding board at the lower end, and seven keys, but no bars. (Illustration No. 168.) The Kalpa Sútra of Káty áyana notices a harp with a hundred strings, but what it was like I cannot say.

Of percussion instruments, the *dholaka*, played either on one or both sides (Illustrations Nos. 169 and 170), is the most prevalent representative to be met with everywhere; and was made of various shapes. Some were of large size with small ends and broad centres, like the *Mridanga* of our day; others less protuberant in the middle, but with broad

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* पाण्डुलेखेन पत्रके भूमौ वा प्रथमं लिखेत्।
ऊनाधिकम् शोधयेत् पश्चात् पत्रे निवेशयेत्॥

† वंशस्तथा लिखेद्दण्डं लक्ष्म दारिमसेऽपि वा।
सारदारुमयं तु लिखेत् मध्ये सप्त वरे भवेत्॥
सपादकोभवेद्दिर्घं सुवर्णेन प्रलाकया।
पृथक्लक्ष्म तथा मध्ये मध्यदेशे प्रशस्यते॥

तथा अधिकमेदीन पृथ्वीवर्णसमा। चतुरंगुलविस्तीर्णा।
दैर्घ्येण विंशतिः सप्तौ कांक्षेन भरणं भवेत्॥
चतुरङ्गुलमानेन दण्डाकृष्णेन साधना।
चतुरङ्गुलस्तथा वा वो लिखेत् पुस्तकं शुभे॥
नवदशरत्नौ तु सप्तायुरेति वै दिने।

ends like the *pakhawáj*; others again of a very small size. (Illustration No. 172.) Of the large military drum played with a stick, the *rayadhakká* and *jayadhakká*, with which the heroes of the Rámáyana and the Mahábhárata are said to have inspired their legions with military ardour in the battle-field, no specimen has been met with at Bhuvanes'vara; but a small variety, probably the *tin-tini*, *Anglicé* tom-tom, or the kettledrum, so played, is not rare. The tambourine, *khanjani*, is also met with. At Sánchi the large war drum is common. The ceiling of the Mukteśvara porch has several scenes of concerts, in most of which the central figure is represented singing to the accompaniment of a dholaka and cymbals. Flutes, (Illustration No. 171), with lateral blowing holes, pipes, trumpets, (Illustration No. 173), and cymbals, large (*karatála*) and small (*mandirá*), are common everywhere, but all of the ordinary modern form. The flute was performed with three to seven holes; the last was probably the highest number, and the player, who could manage them was deemed highly proficient, for we find in the Toy Cart a servant of a courtezan claiming great superiority on that score. He says, "A pretty situation for a man of my talents; for one who can play the flute with seven holes, the *vina* with seven strings; who can sing like a jackass, and who acknowledges no musical superior, except, perhaps, Tamburu or Náradá."* In one instance I noticed what appeared to me to be a pair of castanets, such as are in use in the present day, and I think that it was not unknown in ancient times in India. It occurs among the sculptures of Thebes, and Wilkinson supposes it was not only used in the Egyptian army, but by the buffoons, who danced to its sound."† At Bhuvanes'vara, it is represented on the ceiling of the Mukteśvara temple. The conch shell scarcely deserves to be reckoned as a musical instrument, but as it was so used, and is common, like the gong *kánsya*, at Bhuvanes'vara, it is necessary to name it. It was of the modern shape (Illustration No. 174), and used very much in the same way as in the present day.

The conch shells of commerce are contributed by three different species; 1st, *Turbinella rapa*; 2nd, *Mazza rapa*; and 3rd, *Voluta gravis*. Of these the first produces the largest shells, best adapted for wind instruments, in making which the only ingenuity required is to drill a hole at the base in such a manner as not to injure the whorls. When blown through, the wind, passing through the different whorls, produces a loud, sharp, shrill, piercing sound which spreads far and wide, and by its nature quickly attracts attention. Hence the conch was held in great esteem as a war trumpet. In the present day, it is used as a trumpet in the temples to mark the close of a religious ceremony called *árati*, in course of which lights, napkins, and other articles are turned repeatedly in front of an image, and also at *quasi* religious ceremonies, which the fair sex celebrate to mark particular domestic occurrences. The second species produces the most elongated shells, and they are used for offering water to the gods during the *árati* aforesaid, for bathing the images of Vishnu, and for lustrations generally. For this purpose no perforation at the base is needed, but the whorls within have to be cut out clean. Occasionally, but very rarely, the whorls are so cut as to represent five consecutive shells, one within the other, and these are described to be so many separate shells coalesced into one, or five separate mouths, *panchamukha*, of one shell. It is held to be particularly sacred. I have seen only one specimen of this kind; but it had only three interior shells. It is generally as high-priced as the abnormal variety called *dakshinávarta*, in which the whorls, instead of running from right to left, as in the ordinary shell, are reversed, and run from left to right." "It is," says Sir Emerson Tennent, "regarded with such reverence that a specimen formerly sold for its weight in gold, but one may now be had for four or five pounds." This high price is due to the virtues ascribed to it in the Puránas. One of them, the *Váráha*, says, "He who, going to a river flowing towards the east, performs an *abhisheka* ceremony on himself with a right-handed sankha, purges himself from all sin. He who, in such a river, standing up to his navel in water, pours sesamum seed and water profusely on his head from a right-handed sankha, instantly destroys all the sins of his life."‡ Of the virtues of sankhas generally the *Padma Purána* gives a detailed account. According to it, "He who bathes Vishnu with the milk of a gold-coloured cow (*Kapilá*) filled in a sankha, acquires more merit than can be attained by performing a hundred million Yajnas. He who bathes the Great Lord with the milk of other than golden coloured cows, obtains the rank of Brahmá. Pouring Ganges water in a sankha, he, who bathes Mádhava, saying at the same time "salutation to Náráyana," avoids the evil of all future transmigrations. What is the use of bathing in the Ganges for him, who, turning a sankha filled with water before Keśava, pours the water on his own head? He, who offers to Vaishnavas, in a sankha, water mixed with sesamum and tulsi leaves with which the feet of Hari have been washed, acquires the merit of performing a *chándráyana* ceremony."§ The *Brahma-vaivarta Purána* says, "Water in a sankha is most gratifying to the

* Hindu Theatre, I. p. 90.

† Ancient Egyptians, II. 365.

‡ दक्षिणावर्तशङ्खेन जलं यत्र तु सेचयेत् ।
तत्राभिषेकं विधिवत् तस्य पापे प्रणश्यति ॥
दक्षिणावर्तशङ्खेन सिञ्चमिश्रोदकेन तु ।

§ [illegible] मातरं पयसापरम् ।
कपिलाक्षीरदानाद् यद् फलं प्राप्नोदनम् ॥

gods, and is as holy as the waters of sacred pools, except to Samkha. The goddess of fortune remains fixed in those places where the music of the sankha resounds. He is bathed in the waters of all the sacred pools, who bathes in water from a sankha. Hari abides in the sankha; wherever there is a sankha there is Hari. There also abides Lakshmí, and evil of every kind flies away from it."* The fabricators of bracelets make no distinction of these three varieties, and use them promiscuously for their work. In the "Detailed List of Articles contributed by Bengal to the Vienna Universal Exhibition of 1873 (p. 89), Mr. Locke, of the Calcutta School of Art, has the following interesting note on the subject: "The Shánkháris, or shell workers at Dacca, distinguish the several shells and their various qualities by the names *Titkuri, Pati, Lalpati, Alabela, Dhola, Kulai,* and *Shewli*; the Titkuri" (that is, those imported from Titicorin) "being the best in quality of grain, lustre, and suitability for fine cutting and delicate finish. There is considerable variety in the patterns of these sankha bracelets, from the rude broad flat ring to the thin delicate annulet, rounded, or with notched or beaded edges, carved with tigers' heads, enriched with ornamental incising, and illuminated by touches of tinsel, lac-colour, gilding, &c." It should be noticed, however, that those bracelets which are made of entire pieces or annulets cut out of the shell, require the last named species, which from its size yields rings just large enough for the human wrist. The first two varieties are too large for such annulets, and their chips and cuttings are therefore used only in inlaying. Their superior density and gloss adapt them well for this purpose. It should be borne in mind, also, that the different species vary greatly in size according to age, and it is often difficult to identify them in the dry state.

Boats.

That in the time of the Vedas, and for some time afterwards, the Hindus were familiar with ships adapted for sea voyages, is a fact which is now no longer doubted. The frequent mention, in ancient Sanskrit literature, of pearls, which could not have been procured without the aid of boats that could brave the ocean-wave, is of itself sufficient evidence on the subject. But others are not wanting. Allusions to the ocean and to ships are numerous even in the Saṁhitá of the Rig Veda. "The greatness of the Agastyas," is said to be, "as profound as the depth of the ocean."† "He, Varuṇa, who knows the path of the birds flying through the air, he, abiding in the ocean, knows also the course of ships."‡ "May Ushas, dawn to-day, the excitress of chariots which are harnessed at her coming, as those who are desirous of wealth (send ships) to sea."§ "Do thou (Agni), whose countenance is turned to all sides, send off our adversaries, as if in a ship to the opposite shore." (A remarkable prayer for transportation at so early an age). "Do thou convey us in a ship across the sea for our welfare."‖ Again, "Tugra, verily, Aśvins, sent (his son) Bhujyu to see, as a dying man parts with his riches; but you brought him back in vessels of your own, floating over the ocean, and keeping out the waters. Three nights and three days, Násatyas, have you conveyed Bhujyu in three rapid, revolving cars, having a hundred wheels, and drawn by six horses, along the dry bed of the ocean to the shore of the sea. This exploit you achieved, Aśvins, in the ocean, where there is nothing to give support, nothing to rest upon, nothing to cling to, that you brought Bhujyu, sailing in a hundred-oared ship, to his father's house."¶ This story of Bhujyu is repeated in a subsequent hymn where the "tossing ocean and swift ships" are again alluded to.** Again, "you constructed a pleasant, substantial, winged bark, borne on the ocean waters for the son of Tugra, by which, with mind devoted to the gods, you bore him up, and quickly descending (from the sky,) you made a path for him across the great waters. Four ships, launched into the midst of the receptacle (of the waters, sent by the Aśvins,) brought safe to shore the son of Tugra, who had been cast headlong into the waters (by his foes,) and plunged in inextricable darkness."†† Agni is

No. 52

यज्ञायज्ञमवस्यवो भगमिव्रा ऊतये कवे ।
मघवन्नस्मे धेहि तन्नो बृहदुकथे शवसानि दंसनाऽऽ ।
यो रेवानसि दंसनाऽवस्युरिन्द्र सत्पतिः ।
शिक्षा शचीवः शचीभिर्नृभिर्नृमन्नृतावसो ।
अस्मे धेहि श्रवो बृहद्द्युम्नं सहस्रसामृषिम् ।
इषं स्तोतृभ्य आ भर शुक्रं न स्तोषमायुषु ।
विश्वासु पृत्सु दुष्टरमिन्द्रं तमिदमूतये हुवे ।
उतो सहस्रमूतये यज्ञेषु विप्रमूतये ।
सजोषसो दिवा नक्तं यज्ञमक्तुं च वाजिनम् ।
अद्या दूतं वृणीमहे होतारं विश्ववेदसम् ।
मन्द्रं होतारमृत्वियं चित्रभानुं विभावसुम् ।
शोचिष्केशं वृणीमहे सुम्नाय सुक्रतूयवः ।
तं यज्ञसाधमपि वातयामस्यूर्मिं घृतस्य पिन्वतम् ।
तमीमहे महागयं सनिं मेधामयासिषम् ।
स्वदन्तो अमृतं प्रजाया अनमीवासो अक्षता रयिं पिपृत ।
अतो वयं जीवानः प्रजावन्तः सचेमहि ।
हविषा जारो अपां पिपर्ति पपुरिर्नो नर्या पुराणः ।
पितेव नो उपासि सूनवे अग्ने सूपायनो भव ।
सचस्वा नः स्वस्तये ।
यो नः सश्चद्दिवस्परि वसोरग्निर्वसुष्कविः ।
स नो जामिरदितेरनर्वा पातु सं नो अघायतः ।
यो नो अग्निरघायति समिद्धमिरति द्वेषति ।
अधा पोतेव सूनृताग्ने विश्वं प्रति स्फुर ।
अग्ने विश्वं प्रति स्फुर शुक्रो दीदयसि द्युमान् ।
तं त्वा वयं सुमतये सुप्रणीतये सुवृक्तिभिः ।
अग्ने सख्ये मा रिषाम वयं तवाग्ने सख्ये मा रिषाम वयं तव ।
तव प्रणीती पितुरश्यां वसो तव प्रणीती पितुरदाशेम ।
तव शर्मन्प्रियतमे दधाना उप स्थेयाम शरणं न वृक्षम् ।
उप स्थेयाम शरणं न वृक्षं तवाद्य देवयन्तो हुवेम ।
अग्ने तव त्रिधातवे त्रिरस्मभ्यं सप्तधातुभिः ।
पोषं रयिं सुवीर्यं दक्षं दक्षविदा भर ।
दक्षं दक्षविदा भर प्रजावन्तं वीरवन्तं परीणसम् ।
अग्ने सहस्रवीर्यं शतं शतं हिमा ऋषे ।
शतं शतं हिमा ऋषे शतं वाजान्त्सनुष्यतः ।
शतं पूषण्वते गवे शतं सवित्र आपये ।
शतं भगाय दावने शतं नृषाह्याय च

prayed in one place "to bestow a boat fitted with oars." The great sage Vas'ishtha declares, "When (I, Vas'ishtha) and Varuna ascend the ship together, when we send it forth into the midst of the ocean, when we proceed over the waters with swift (sailing vessels), then may we both undulate happily in the prosperous swing. So Váruna placed Vas'ishtha in the ship, and by his mighty protection made the Rishi a doer of good works."* The Kapinjala bird is said "to foretell what will come to pass, by giving due direction to its voice, as a helmsman guides a boat." In the Introduction to the third volume of his translation of the Rig Veda, Professor Wilson says, "The same familiarity with the sea that has been previously commented on occasionally occurs, with sufficient explicitness to leave no doubt of the meaning of the text: thus in one place the rivers are said, 'to rush to the ocean eager to mix with it' (p. 59); and again, 'the rivers disappear in the ocean' (p. 221), where also it is said that 'those desirous of profit are engaged in traversing the ocean,' clearly indicating maritime traffic: the Maruts, or personified winds, are said 'to toss the clouds like ships', or as the Scholiast amplifies a rather elliptical phrase, as the ocean tosses ships; in another place (p. 425), although the particular expressions may be equivocal, yet it is undeniable that the passage is intended to convey the idea of the crossing of the ocean by certain individuals under the guidance of Indra."† Manu lays down rules for the guidance of maritime commerce, and the Rámáyana alludes to merchants, who traffic beyond the sea and bring presents to the king (III. 237). In the Mahábhárata mention is made of a large boat provided with machinery, which could defy the hurricane; but it was intended for moving only on a river. Kálidása, in the Sakuntalá, gives the story of the merchant Dhanavriddhi, whose immense wealth devolved to the king on the former's perishing at sea, and leaving no heirs behind him; and in the Hitopadesa, a ship is described as a necessary requisite for a man to traverse the ocean, and a story is given of a certain merchant, "who, after having been twelve years on his voyage, at last returned home with a cargo of precious stones." The details of Vijaya Sinha's piratical expedition to Ceylon are familiar to the readers of the history of that island. Arrian alludes to the *Kolandiphontas*, (apparently a corruption of the Sanskrit *Kolantarapota*, "ships for going to foreign shores,") or "large ships on the coast of Travancour, in which the natives traded to Bengal and Malacca," in contradistinction to the *Monoxyla* of Pliny, which was probably the same with the *Sangara*, and made of one piece of timber, for coasting and river trade.‡ Other notices of the sea and ships may be multiplied *ad libitum*, to shew that the ancient Hindus were accustomed to venture out on the "black waters" in search of wealth. No proof of this, however, is to be had in sculpture. At Sánchí only two boats have been seen,§ one "a rude canoe made up of rough planks rudely sewn together by hemp or string;" and the other, "a stately barge with a long arching prow carved to represent the head and fore paws (winged) of a lion with the beak of a hawk, and the stern shaped like the tail of a fish curved upwards." Such fanciful prows, it would seem, were common enough in former times, for the *Yuktikalpataru* names the heads of lions, buffaloes, serpents, elephants, tigers, birds, frogs and men, as the most appropriate for figure-heads of boats.‖ "Boats not unlike the Sánchí specimen in design," says Mr. Fergusson, "may still be seen opposite the ghats at Benares on festal occasions, or on the lakes at Oudypore, or whenever a Hindu palace has a lake attached to it."¶ Both the Sánchí boats, however, appear amidst lotuses, which in this country never grow in the running water of rivers, and are obviously not intended for the ocean. At Amarávati too there are no ships, and at Bhuvanes'vara, no marine or boat scene has come to notice. Considering that the place is situated so near the sea, the total absence of such scenes argues that, at the time, the Hindus had all but entirely retired from the sea. At Puri, the Bhoga Mandapa of the Great Temple represents a boat, but it is evidently intended for a river. (Woodcut No. 52).

Food and Drink.

Nothing also has been met with in sculpture regarding the nature of the food which the people of Orissa ordinarily used twelve hundred years ago. The principal article was no doubt, as now, rice, but it is not shown in any form on the temple. Fish, meat and vegetables are also unrepresented, but sweetmeats, cakes and other articles of luxury are occasionally delineated, and these indicate a state of considerable social refinement. Reference has already been made (p. 111) to the figure of Ganes'a in the Great Tower at Bhuvanes'vara holding a bowl in which are shown a number of globular lumps, each made up of a collection of small round grains exactly representing the sweetmeat now generally known by the name of *motichur*, or "broken pearl." It is made of a paste of gram fried in ghi, and subsequently steeped in syrup. In the temple of Bhagavatí and that of Muktes'vara, there are several figures in bas-relief, with cakes of different kinds in their hands, but their nature cannot be clearly ascertained.

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* Wilson's Rig Veda, IV. 17.

† Ibid III., p. 16.

‡ Periplus of the Erythræan Sea, I., p. 23.

§ Tree and Serpent Worship, plate XXXI.

‖ केसरी सरिता माता सिन्धवो भाव एवच ।
पत्नी मेषा वनस्थश्च रोमाणि वनजानिच ॥

MS. No. 445, in the Library of Rája Jotindramohan Tagore of Calcutta, Fol. 71 A.

¶ Tree and Serpent Worship, p. 127.

As already stated (*ante* p. 110), drinking vessels are common at Bhuvanes'vara, but they are never shaped like animals' heads as in Assyria and Etruria. Of the nature of the beverages which they contained, nothing can be said. The religion of Śiva, and that of his consort, recognise the use of spirituous liquors as an element of devotion, and it is to be supposed that the people who followed those forms of religion did avail themselves of the license to a considerable extent. Six hundred years before the time, we find that drinking wine and spirits was almost as common among the Indians as it is now in Europe. In the Śakuntalá, when the fisherman, who brought the lost ring to the king, proposed to give to the policemen half of the money he had received as a present from Dushyanta, the Superintendent, joyously accepting the offer, remarked: "Thou good fisherman, you are an excellent fellow, and I begin to feel quite a regard for you. Let us seal our first friendship over a glass of good liquor. Come along to the next wine shop, and we will drink your health;"* and the whole party agreed to the proposal to make the fisherman stand a treat, saying "by all means." Nothing short of free and undisguised use of spirit by the ordinary people of the country could have justified the poet in introducing such a scene. That the practice was not confined to the lower orders of the people, is evident from the fact of the Superintendent having been a relation of the king. It is also manifest from the Sánchí bas-reliefs, among which more than one lady of high rank may be seen standing in a balcony on the roadside with a drinking cup in her hand, and a maid with a decanter by her side ready to replenish it. In the garden scene two of the lovers have tazzas in their hands with an urn before them, clearly indicating indulgence in something more potent than water or sherbat. Commenting on this scene, Mr. Fergusson justly observes, "We ought not to be surprised that drinking should be a favourite indulgence in these days. The Mahábhárata is full of drinking scenes, and many of its episodes turn on the results of intoxication. Even the gods in those days got drunk on soma juice; why not poor mortals? In addition to this, we must bear in mind that though the Hindus of the plains are so remarkable for their temperance, all the hill tribes drink joyously to the present day. No ceremony, civil or religious, takes places without drinking and dancing, and the festival generally is brought to a close by all—the men, at least—being so drunk as to be unable to continue it."† No doubt the Śástras condemn indulgence in wine, especially by women, as sinful; but neither the anathema of the moralist, nor the ordinance of the lawgiver, seems to have put a stop to the manufacture of spirituous liquors in the country, or to the importation of valuable foreign wines such as are mentioned in Arrian's Periplus, which were evidently destined for the use of men of wealth and consequence.‡

Arms.

It is usual among European authors to treat the history of arms under four different heads: *1st*, the age of stone; *2nd*, the age of bronze; *3rd*, the age of iron; and *4th*, the middle ages. An earlier age would be that of wood, for of all artificial arms, a club, or stick, would suggest itself sooner to a primitive race than a celt of chipped flint; and certain it is that among the many barbarous races still extant in different parts of the globe, the wooden spear and the bow and arrows appear much more universal than celts and stone hatchets. Wood, however, is not lasting, and the earliest relics available being made of stone, the fourfold division is the most convenient for the arrangement of ancient arms in museums and public collections, and to a certain limited extent for the treatment of the subject in historical disquisitions, using the words "age of stone," or "age of bronze" &c., in the same way as geologists use the phrases, the age of reptiles, the age of mammals, &c., implying a prevalence of particular class of objects over, and not the total exclusion of, others. In India, the same arrangement would no doubt be desirable. The number of stone weapons, chiefly celts, knives, and arrow-heads collected in the Museum of the Asiatic Society of Bengal, fully testifies to the extensive use of such arms by the inhabitants in a historic age, and ancient Sanskrit literature also bears evidence to the fact. The monkeys of Ráma are said to have thrown stone implements against their enemies, and the thunderbolt of Indra (*Vajra, Asani*) was a lithic missile; but hitherto not a single authentic specimen of any Aryan stone weapon has been met with in this country, and bronze arms seem to be all but unknown. From the time of the Rig Veda to the present day, wood and iron have been the chief, if not the only, materials employed in the fabrication of offensive weapons; and as both those articles have been used promiscuously at all times, it is impossible to divide the subject into an age of wood and another of iron. The classification adopted in the Agni Puráṇa is threefold, *viz.*, missiles cast by machines, *Yantramukta*; 2*nd*, ditto hurled with the hand, *Páṇimukta*; *3rd*, non-missiles, as swords, axes, &c., *Amukta*; the last including two subsidiary classes. In Wilson's Essay "On the Art of War as known to the Hindus,"§ the subsidiary classes are reckoned among the primaries. These include, 1st, weapons which may be used either as non-missiles or as missiles, *Muktámukta*, such as javelins, spears, clubs, &c. 2nd, "Natural weapons, as the fist."

* William's Translation, p. 154.

† Tree and Serpent Worship, p. 139.

‡ *Vide passim* "Spirituous Drinks in Ancient India," in the Journal, Asiatic Society of Bengal, XL., p. 1, *et seq.*

§ Works, Vol. IV., p. 299.

Bow.

Of the first class the oldest, the most important, and the most generally adopted national weapon of the Hindus from prehistoric times to the end of the middle ages, was the bow, and heroism in this country was invariably associated with superior proficiency in the use of that arm. No one rose to distinction as a warrior, who did not wield a heavy bow, and *Dhanurdhara*, or "the master of the bow," was the highest term of compliment that could be addressed to him. By a figure of speech, the same term is even to this day applied also to men who have achieved success in other walks of life. The Agni Purâna praises its use by the remark that, "of all battles, that in which bows are used is the best of all; that in which men fight with barbed instruments is tolerable. Fighting with swords is low and mean, and without arms, with bare hands, the meanest." "Hence perhaps," says Professor Wilson, "one of the elements of Indian inferiority in the field, as the arrow, however formidable as a missile, was but a feeble instrument in close combat, and its use was calculated to impair the courage of the combatant, by habituating him to shun rather than to seek the contiguity of the foeman."* So great was the importance attached to the bow in ancient times, that the code of rules regarding archery was ennobled as a subsidiary Veda, *Dhanur Veda*. These rules are no longer available; but enough remains in Sanskrit literature to show the estimation in which the arm in question was held. Certain it is that it led to the word *Dhanus* being used as synonymous with arms in general. So also the words *Dhanuska* and *Dhanwin*, signifying literally a bowman, were always used to denote a warrior or soldier. In the Rig Veda, the employment of the bow in war is frequently mentioned, and the manner in which it is extolled may be perceived from the following prayer of Payu from the fifth Ashtaka: "May we conquer the cattle (of the enemies) with the bow: with the bow may we be victorious in battle: may we overcome our fierce exulting (enemies) with the bow: may the bow disappoint the hope of the foe: may we subdue with the bow all (hostile) countries. This bowstring, drawn tight upon the bow, and making way in battle, repeatedly approaches the ear (of the warrior), as if embracing its friend (the arrow) and proposing to say something agreeable, as a woman whispers (to her husband). May the two extremities of the bow, acting consentaneously, like a wife sympathising (with her husband,) uphold (the warrior,) as a mother nurses her child upon her lap; and may they, moving concurrently, and harassing the foe, scatter his enemies."† The Rámáyana and the Mahábhárata extol it even more highly, and the story of the great bow of Síva, which Rama snapped asunder and won a noble bride, shows that large heavy bows were held in estimation. Proficiency in archery was also greatly prized, and the Pándu brothers obtained a princess as the reward of successfully shooting at a mark while looking at its shadow in water.

Materials of Bows.

Of the material of which the bow was made, little is said in ancient works, except that horn was sometimes used for the purpose. But the Agni Purâna, which in its chapters on archery and arms, and on regal administration, is, according to Wilson, distinguished by an entirely Hindu character, and must have been written long anterior to the Muhammadan invasion,‡ supplies the deficiency. In its chapter on arms it gives the following: "Bows, O best of the twice-born, are formed of three things, to wit, metal, horn and wood; and the string of the bow is likewise made of three substances, viz., *sana* fibre (*Crotalaria juncea*), hemp (*Bhangá, Cannabis sativa*), and skin or hide. The most appropriate length for a bow is four cubits, three and a half cubits being middling, and three cubits inferior; it is to be so prepared that there may exist no unevenness from its centre to the extremities; the middle part should be joined with a spare piece of wood, so that it may be firmly held. The ends of the bow are to be made thin and tapering, so as to resemble the eye-brows of a handsome woman. Metal and horn bows should be made either of pure iron, or horn separately, or of those two substances conjointly. The horny bow is to be formed of a good shape and decorated with gold. Bows which are crooked, or have cracks or holes in them, are not good. The metallic bow is to be made of gold, silver, copper and black iron. The horny bow made of the horns of the buffaloe, the Sambha and the Rohisa are good. Bows are also made of sandal wood, ratan, the sál wood, the Dhavana, (a kind of *Hedysarum*) and the Kakubha (*Pentaptera arjuna*). But the bow made of bamboos which grow in the Sarat or clear season of autumn, and which are cut and taken at that time, is the best of all. Bows and scimitars are to be worshipped by repeating mantras capable of fascinating the three regions Svarga, Martya and Pátála." The most remarkable fact in the above extract is that the elastic bamboo is most extolled. The black iron was probably steel, and the other metals were used as ornaments; they are too inelastic to form a bow themselves. The horny bow was greatly esteemed, and Vishnu claims it as especially his own. Homer refers to the horny bow in the 110th verse of the 4th book of the Iliad, and Arnold thus explains it: "κὰδ τε κέρα τέκτων. The horn worker wrought (ἀκόνησεν) the horns, and fitted (ἔφαρμε, ἄφαρμε, ἁρτύς, D. 84.) the two lower ends of them to each other, so that they now made one bow."§

* Works, IV., p. 291.

† Wilson's Rig Veda, IV. p. 23.

‡ Wilson's Vishnu Purâna, Hall's ed., Preface, p. xlvi.

§ Arnold's Homer's Iliad, p. 112.

The size approved, four cubits, is nearly the same as that of the Egyptian bow, which, according to Wilkinson, measured from five to five feet and a half in length;* and among the materials for bow strings we have mention of hide, which was likewise used for that purpose by the Egyptians, as well as the Greeks of the time of Homer.† The Agni Puráṇa does not mention the Murá (*Sanseviera zeylanica*), as a fit plant for yielding the finest and strongest fibres for bowstrings; but other authorities, mostly older ones, are full of praise of that plant as a source of valuable fibre for the purpose, and Manu especially assigns it as well suited for girdles for warriors. From specimens to be seen in sculptures, the ancient bow seems to have been of the same shape as the modern Indian arm, made either of bamboo or horn (*śáranga*), and provided with a strip of deer skin, or a murvá cord for string. At Bhuvanes'vara, a specimen (Illustration No. 203), has the body of the bow strengthened by knots tied at short intervals; but at Sánchi and Amarávatí nothing of the kind has been seen. Some Indian bows have an inward bulge in the middle, so that their shape includes segments of three circles,—the "triple bent" bows of the Rámáyana; their counterparts were not unknown in Egypt. In ancient Greece, the tips of the bow, according to Homer, used to be mounted with stag horn, but the sculptures in this country do not make them apparent. The manner of carrying the bow was ordinarily to sling it from the left shoulder, or to bear it aloft in the left hand. In stringing the bow, one end of it was placed on the ground, the inner side of the middle resting against the knee, and the upper part pressed inwards with the left hand, while with the right hand the loop of the string was slid to the notch at the upper end. This is exactly the process which the Egyptians followed in former times, and the Hindus still practise to this day.

Ancient arrows.

Of the most ancient arrow, the Rig Veda gives the following description: "The arrow puts on a feathery wing: the horn of the deer is its point: it is bound with the sinews of the cow."‡ The commentator in one place supposes that the points of such arrows were poisoned,§ and in another place the Veda itself describes the arrow as made of the *sara* reed with its blade of iron and point anointed with poison.‖ The deer-horn point was undoubtedly the most ancient form; and must have prevailed for some time; but, seeing that the arms and armour of Greece in the time of Homer (B. C. 1000) were for the most part of bronze, though iron was known and is often spoken of under the name of difficult to work in," it may be fairly asked,—did the Aryans, to any large extent, employ iron for the fabrication of their arms during the early Vedic period of the Rik Saṁhitá, notwithstanding occasional mention in it of the iron-pointed arrow? To meet this question, it is necessary to enquire to what extent that metal was known and worked.

Knowledge of iron.

The quotations given in the first chapter about irón-walled cities, clearly show that the hardness of iron was well known, but the epithet being in those cases metaphorically used, they do not suffice to prove that the metal was worked into shape. In the passages in which Indra is described as hurling his iron bolt upon the quick-moving Asuras,¶ or where his horse is described as having feet of iron, the same exception may be easily taken, though the last description may be accepted as an indication of the practice of shoeing horses. But swords (II. 156), spears (IV. 25), javelins (II. 232), lances (I. 774), (IV. ii. 288), and hatchets (I. 120) are frequently mentioned, and these weapons are "bright as gold," or golden (IV. 19), "shining bright" (I. 175), "blazing" (IV. 93), "sharp" (IV. 113), and "made of iron" (I. 220); they are "whetted on a grindstone" (II. 36) to improve their keenness (I. 150), and "polished to enhance their brightness" (II.*326). There are also allusions to razors, which would be utterly worthless unless made of iron; and it may be very fairly presumed that those who could and did forge razors of iron, could not forget the value of that metal as a material for pointed or edged weapons. It may be added that, according to Shaw, "the hardest tools in ancient Egypt, such as drills for working the granite obelisks, were made of Indian iron. Pliny says: "Ex omnibus generibus palma Serico ferro est. Seres hoc cum vestibus suis pellibusque mittunt. Secunda Parthico, neque alia genera ferri ex mera acie temperantur, cuneis enim admiscetur. (Lib. XXXIX. C. 14.) According to al Edrissi, "in montibus Kabel inveniuntur ferri fodinæ celeberrimæ, et humanis usibus aptissimæ, producunt enim ferrum acutum et vernstum." According to Nearchus, King Porus gave 30 lbs. of steel to Alexander as the most precious present he could offer; and to "give an Indian answer," meaning "a cut with an Indian sword," is a common Arabic proverb in Arabshah, (p. 364 apud Vincent's Periplus). It would be inconsistent to suppose that the race which produced such iron and swords did not know how to use, or knowing, did not use them.

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* Wilkinson's Ancient Egyptians, I. p. 304.

† *νεῦρα βόεια* Homer, II., p. 113.

‡ Wilson's Rig Veda, IV., 26.

§ "You (As'vins) carried off Jahusha to the top of the mountain in your triumphant chariot, and slew the son of Vis'vánch with a poisoned (arrow)." Wilson's Rig Veda, I., 317.

‖ Wilson's Rig Veda, IV., 27.

¶ Wilson's Rig Veda, I., 328, III., 23.

Shape, size and material of arrows.

Of the shape of the Indian arrow-heads, the Vedas afford no information, but the Rámáyana and the Mahábhárata fully supply the deficiency. According to those authorities most of them were barbed; some were spear-shaped, others crescent-shaped with the cutting edge either concave or convex; some needle-pointed, dentiform, or serrated, others square with two, three or more points. In sculptures, some of these forms are distinctly visible. Of the size and make of arrows, the Agni Purána gives the following description: "Arrows should be made of bamboos or *sara* reed, *(Saccharum sara)*, which must be free from spots, &c. They should be straight, golden coloured, and have feathers of birds attached to their lower extremities." The Homeric arrows were likewise feathered, πτερόεντα, "and the feathers of large birds of prey were esteemed the best." "Besides the arrows commonly used, the Dhanurveda describes two other kinds, the Nárácha entirely of iron, and the Nálika made of reed. The latter was intended for a long flight, and is, therefore, said to be most appropriately used for sieges. Curtius perhaps alludes to the Nárácha when he says, some of the archers shot with arrows which were too heavy to be very manageable."*

Quiver.

Ordinarily the quiver was probably made of hide or basket-work; but sometimes metal plates were also used in its fabrication. The Rig Veda often names quivers of gold, but it is not certain whether they were actually made of that metal, or were so called only by a poetical licence. They were slung on the back (Illustration No. 63); sometimes two behind the two shoulders, tied in front by a cross belt. At Bhuvanesvara quivers are pretty common, but being placed behind figures in bas-relief, their size, form, and make cannot be fully ascertained.

Drawing of bows.

The manner of drawing the bow up to the ear, as in modern Europe, while standing with the body turned sideways, is pointed out in the extract from the Rig Veda given above; and is confirmed by several passages in the Rámáyana, the Mahábhárata and other ancient works in which the merit of aiming with the arrow drawn in a line with the eye to the ear *(ákarnaakrishna)* is highly extolled. In the Sánchí sculptures, the same style is distinctly visible, and that this was the most perfect mode of using the bow, is evident from its adoption by some of the most civilized nations of antiquity, such as the Egyptians. The ancient Greeks, however, thought and acted differently. According to Homer, the bow should be held right in front, and the string drawn to the body, στηθέϊ μὲν νεῦρα τανύσθην. (D. 123.) and hence it is that "the Amazonian women are reported to have cut off their right breast, lest it should be an impediment to its use."† In later times the Greeks adopted the Egyptian style, but never acquired much proficiency in it. Homer condemns it by the remark:—

ἤδεε δὲ πτόλεσσιν καὶ ἀξέστῃσι μάχεσθαι,
καὶ ξίφεσι μεγάλοισι καὶ ἔγχεσιν ἀμφιγύοισιν, (Il. 0.711-12.)

Layard's plates show that the ancient Assyrians also followed the Greek custom, and drew their bow-strings towards the breast, and not towards the right ear, though for the purpose of a good aim the latter would be the most convenient place. In the Iliad the epithet κυκλοτερὲς ἄντυγι indicates that the bow was so drawn as to reduce it to a circular shape, but nothing of the kind is mentioned in the Hindu Sástra. The λιγὺς—ἶαχε or click and twang of the Homeric bow-string have their counterparts in the *dhanustankára* of the Hindus.

Gauntlet.

To protect the left forearm from the abrasion of the bow-string, it was wrapped in folds of leather,‡ but the sculptures do not anywhere show a trace of this gauntlet. The Egyptians used a slip of leather for the same purpose, but instead of folding it round the forearm, wore it only on the inner side, tied at the wrist and the elbow.§

Attitude in drawing the bow.

Of the different attitudes which were assumed in using the bow, the Agni Purána gives the following description: "The *Sampadasansthána* attitude in shooting, is the standing with the feet even, the two great toes, ankles, and heels being closely opposite each other; and the position of standing with the feet three spans apart. Laying the centre of gravity on the toes, and keeping the knees unbent, is the *Vaishákha* posture. The attitude in which both the knees appear like a flock of geese, and in which the archer stands with the feet four spans asunder, is called *Mandala*; and the *Alidha* posture is said to be that, in which the right thigh and knee are kept unbent, and in which the feet are placed five spans apart, assuming the shape of a plough. The contrary of the above is called the

* Wilson's Works, IV., 209.
† Wilkinson's Ancient Egyptian, I., 208.
‡ "The ward of the forearm, protecting it from the abrasion of the bow-string, surrounds the arm like a snake with its convolutions." Wilson's Rig Veda, IV., 26.
§ Wilkinson's Ancient Egyptians, I., 306.

Pratyaḍha attitude. The *Jala* attitude is that in which the left leg should be kept in a crooked position, the left heel at a distance of five fingers from the ankle of the right foot, and the knees twelve fingers apart from each other. The *Daṇḍáyata* posture is of this description; the left knee straight, and the right advanced or a little bent, and firmly fixed; but when this attitude is such that the knees are two cubits distant from each other, it is called *Vikaṭa*. The *Sampata* attitude is said to be the bending the knee double, and keeping the feet raised from the ground (except the fore part), or standing with the legs straight as a stick, and the feet sixteen fingers apart from each other."*

Pellet-bow and sling.

In the Rámáyaṇa mention is made of the bow as an instrument for casting pellets of stone; but its use was most probably limited to shooting birds, for it is nowhere named in connexion with warfare. The sling too was well known, and Bharata, in the Rámáyaṇa, is described as highly proficient in its use. Wilkinson says: "The Acarnanians were proud of their skill in managing it, and were surpassed by the Achæans alone, of all the Greeks, who even vied with the natives of the Balearic Islands; and so expert were these last, and of such importance did they consider the sling, that the principal care of a parent was to instruct a boy in its use."† Homer admits the sling (σφενδόνη) as an instrument of war, and the "plaited wool," of which it was made, serves in one place as a bandage for tying a wound. The Hindus, however, never gave it any prominence, and deservedly treated it with contempt. Neither the pellet-bow nor the sling occurs in sculpture.

Fire-arms, Catapults, &c.

From the frequent mention of the *Agnyastra* or "fire-arms," it is to be inferred that the Hindus had some instruments for hurling shells or balls of burning matter against their enemies; but no description of any such has yet been met with. There are two scenes of sieges among the Sánchí bas-reliefs, but no traces in them of battering-rams, or catapults of any kind for breaking down walls, or for hurling stones amidst the ranks of the enemy, or of engines for casting burning matter to a distance to set fire to besieged towns and fortresses, are visible. There are several martial processions and battle scenes at Bhuvanes'vara; but they too are devoid of any evidence on the subject. In the *Udyoga Parva* of the Mahábhárata, Yudhishṭhira is described as collecting large quantities of rosin, tow, and other inflammable articles for his great fratricidal war; but nothing is there said of any engine with which they could be hurled against his enemies. The only instruments named, which could be assumed to have belonged to this class, are the *Mahâyantra* or "the great engine," and the *Sataghni* or "conticide," a mitrailleuse, which could kill a hundred at a time; but what they were like, and how they worked, is not known.

In connexion with fire-arms, it is usual to advert to gunpowder, but as I have no new evidence to adduce on the subject, I must refer the curious reader to Wilson's Essay "on the Art of War as known to the Hindus," Sir H. Elliot's "Note on the early use of gunpowder in India," in his "Index to the Historians of Muhammadan India," and Lassen's Indische Alterthumskunde, II. p. 641, et seq.

Javelins and Discuses.

Of the arms of the second class, *viz.*, missiles to be hurled with the hand, the only two worthy of notice are the javelin and the discus. The former, under the name of *śakti*, is frequently mentioned, and warriors mounted on horses or elephants used it largely, but it passes so insensibly to the spear or the thrusting weapon, that I have not been able to ascertain its exact form, and am doubtful if any distinction was ever made between them. I shall, therefore, notice the various kinds of spears and javelins seen in sculpture under one head. The discus, or quoit, is an old Indian favourite, of which mention is made even in the oldest Vedas.‡ Unlike the Sikh weapon of the present day, which is a simple ring with a sharp cutting edge, it had cross bars in the middle, and sometimes flame-like or pointed projections round the periphery. Its ancient name is *chakra* or "the wheel;" but one of the commentators on Amara identified it with the *Práṇa*. It occurs both in sculpture, and also formed of iron, and mounted on spires of Vaishṇavite temples as a sectarial mark, like the cross of the Christian churches. Formerly certain classes of Vaishṇavas used to have a figure of it branded on the arms or breasts; the Sivites replaced it by the trident.

Spears, lances, &c.

Under the head of *Muktámukta* or optional missiles, come the various forms of spears and lances. They were highly important weapons, and Sanskrit writers are full of their praise. They were made of bamboo, pointed with blades of steel, iron or copper, and balanced with an iron knob or spike at the lower end. The light ones, like that shown in Illustration, No. 204, from the Great Tower of Bhuvanes'vara, were probably used as javelins, while the heavy ones were reserved for thrusting. Occasionally they were made entirely of iron, when they were known

* Wilson's MS. Translation. I have not been able to find the original in this in my MSS. of the text. The description in some places is not very clear.

† Ancient Egyptians, I. p. 317.

‡ "Endowed with augmented vigour he hurled (against the foes) the wheel of the chariot of the sun." III., 35. If the suggestions of Sáyaṇa be omitted, the wheel would be a discus.

by the name of *tomara*. In some instances they had a small pennon below the blade. Illustration No. 177, shows a copper blade now in the Museum of the Asiatic Society; and Illustration No. 198, from *Sánchi*, shows a pennon. These weapons are, however, not well represented in sculptures, except as tridents, of which there is a great number and of different forms. (Illustrations Nos. 193, 195 and 196.) One of a short mace-like form, mounted with three prongs and a small axe blade, is peculiar, and a drawing of it is given in Illustration No. 190. It may be compared to a European halberd, except in its shaft which is not near as long.

Clubs.

Of arms of the non-missile class sticks, clubs and maces were the most ancient. Though they could be hurled at an enemy when hard pressed, they were ordinarily not intended for such a purpose. Illustrations, Nos. 201, 206, 207 and 208, all taken from the Great Tower of Bhuvanes'vara, are the principal varieties of this class of weapon. Illustration No. 202, shows a large mace or club five feet high, tied with ornamental metal bands. Its body is ribbed, and the ends are mounted with thick knobs. It has been taken from the hand of a guard at the entrance to the Bhoga Mandapa at Puri.

Battle-axe.

The battle-axe was in India, as much as in ancient Europe, a dreadful weapon of destruction, and various forms of it may be seen at Sánchi, Amarávati and Bhuvanes'vara. Illustrations Nos. 188, 189, 191 and 192, represent some of the commonest kind, and a very elaborate one is shewn in Illustration No. 187, taken from the hand of a statue of Ganes'a in the Great Tower.

Swords.

The most important weapon of this class, however, is the sword. Its oldest forms are shown in Illustrations Nos. 175 and 176, taken from two copper weapons in the Asiatic Society's Museum. Their history is not known, but apparently they are the oldest Indian metal arms that have been preserved to our time. Both of them are double-edged, and ribbed in the middle, to lighten the weight and at the same time to give them sufficient strength: neither has a guard or quillon above the hilt: but the second has two quillons in the place of the pummel, and the first only one. The swords are thick and heavy, and must have been very inconvenient to use. The edges of both are in places jagged from having been repeatedly struck upon some hard substance. It is impossible to say if the old Vedic swords were of this shape; but both at Sánchi and Bhuvanes'vara forms very like it, but with somewhat better handles, are not uncommon. (Illustration No. 181). At the latter place, the ordinary Indian sabre, the *asi* of Sanskrit writers, whence probably the *acinaces* of the Romans, is common; it was generally worn on the left side, and, not as among the Greeks and Romans, on the right side. Its blade is short and curved, but not quite so much as that of the scimitar. It is single-edged, except near the point, where it is sharp on both sides. Its handle is provided with quillons and pummel, rarely also with a guard. At *Sánchi* there is a straight broad sword in a scabbard, very like a Scotch claymore; and straight swords like the navy cutlass are also met with at Bhuvanes'vara (Illustrations Nos. 182 and 183). But the most important instrument of the sword class at the latter place is the *khaṇḍá*, a heavy, broad, single-edged sword with a turned-up point, something like a Chinese sabre-knife. It was the favourite weapon of the goddess Durgá in her different manifestations. In the present day it is used for sacrificial purposes, being too heavy for warfare. It is always carried in the hand, never slung from the waist. A modification of it, called *dháp*, was for some time the ordinary offensive arm of the Bengal police. The Mahrattas called their long, straight broadsword by the name of *khaṇḍá*, and in Duff's History of the Mahrattas there is a drawing of the famous *Khándárájá*, or "king of Khándás," of the great patriot Sivaji; its counterpart is frequently seen in Orissan sculptures (Illustrations, Nos. 179 and 180). In the temple of Gaurí at Bhuvanes'vara, there is a double-bladed straight sword; but it was probably a fancy weapon, not of much actual use. (Illustration No. 178.)

The following extract from the Vrihat Sanhitá of Varáha Mihira, (Chap. 4) affords many curious traits of the superstitions which formerly prevailed, and to a certain extent still prevail, in India in regard to swords and their uses:—

1. "A sword of the longest description measures fifty digits; the shortest is of twenty-five digits. A flaw on such a spot (of the sword) as corresponds with an odd number of digits, must be deemed ill-ominous.
2. Yet flaws resembling a Śiva linga, śrivatsa figure, umbrella, emblem of Śiva, earring, lotus, banner, weapon, or cross, are held auspicious.
3. Flaws shaped like a lizard, crow, hare, carrion bird, headless trunk or scorpion, and several flaws along the upper edge, are unlucky.
4. A sword that shows a chink, is too short, blunt, damaged at the upper edge, unpleasing to eye and mind, and without form, is unpropitious. The reverse qualities forebode favourable results.
5. The rattling of a sword (of itself) is said to portend death; its not going out of the sheath (when drawn) augurs defeat. There will be strife when the sword jumps out of the scabbard by itself, but victory when it is seen flaming.
6. The king ought not to unsheathe it without reason, nor rub it, nor look at his own face in it, nor tell its price. He should not mention the place whence it has come from, nor take its measure, nor, without precaution, touch the blade.
7. The most esteemed swords are those that are fashioned like a cow's tongue, a lotus-petal, a bamboo leaf, and an oleander leaf rapiers and scimitars.
8. If a wrought sword proves too long, it may not be shortened by striking off a portion of it, but should be polished till it has the length required. The owner dies, if a piece is struck off at the upper end; and his mother dies, if the same is done at the point.

9. From a flaw on the hilt you may infer the existence of a corresponding flaw on the blade, just as you may conclude on seeing a mole in the face of a damsel, that there is another such in her hidden parts.

10. And by observing which part of the body is touched by a swordsman, when consulting the diviner, the latter will be able to indicate the place of the flaw on the sword in the scabbard, provided he (the diviner) knows the following rules.

11—15. If the man touches his head, the flaw is at the first digit; the second digit corresponds with the forehead; the third with the spot between the brows; the fourth with the eyes; the fifth with the nose; the sixth with the lips; the seventh with the cheeks; the eighth with the jaws; the ninth with the ears; the tenth with the neck; the eleventh with the shoulders; the twelfth with the breast; the thirteenth with the armpits; the fourteenth with the paps; the fifteenth with the heart; the sixteenth with the belly; the seventeenth with the loins; the eighteenth with the navel; the nineteenth with the abdomen; the twentieth with the hip; the twenty-first with the pudendum; the twenty-second with the thighs; the twenty-fourth with the knees; the twenty-fifth with the legs; the twenty-sixth with the part between the legs; the twenty-seventh with the ankles; the twenty-eighth with the heels; the twenty-ninth with the feet; the thirtieth with the toes: such is the theory of Garga.

16—19. The consequences to be foretold from a flaw in the first, second, third digit, and so forth, up to the thirtieth digit, are as follows: death of a child, obtaining of wealth, loss of riches, good fortune, captivity, birth of a son, quarrels, acquiring of elephants, death of a child, acquiring of wealth, destruction, getting a wife, grief, gain, loss; getting a wife, death, prosperity, death, contentment, loss of wealth, acquiring of riches, death without salvation, obtaining of wealth, death, good fortune, poverty, dominion, death, kingly power.

20. Upwards of the thirtieth digit no consequences are specified; in general, however, the flaws at the odd digits are injurious, at the even ones auspicious. But according to some authorities, the flaws from the thirtieth digit upwards to the sword's point are of no consequence at all.

21. A sword that smells like oleander, blue lotus, elephant's frontal juice, ghee, saffron, jessamine, or Michelea champaka, brings good luck; but ill-omened is one that has the odour of cow-urine, mud, or fat.

22. A smell similar to that of tortoise blubber, blood, or potash, augurs danger and pain. A sword glittering like beryl, gold, and lightning, brings victory, health, and prosperity.

23. The fluid to imbrue a sword with, according to the precept of Uçanas is: blood, if one wishes for a splendid fortune; ghee, if one is desirous to have a virtuous son; water, if one is longing for inexhaustable wealth.

24. An approved mixture to imbrue the sword with, in case of one desirous to attain his object by wicked means, is: milk from a mare, a camel, and an elephant. A mixture of fish bile, deer-milk, horse-milk, and goat-milk, blended with toddy, will make the sword fit to cut an elephant's trunk.

25. A sword, first rubbed with oil, and then imbrued with an unguent compounded of the milky juice of the Calotropis, goat's horn, ink, dung from doves and mice, and afterwards whetted, is fit for piercing stones.

26. An iron instrument imbrued with a stale mixture of potash of plantains with butter-milk, and properly whetted, will not get worked on a stone, nor blunted on other iron instruments."*

Two thousand years ago the sheath was generally made of wood, covered, as in the present day, with pink cloth of some value. Thus in the Toy-cart:

"*Servant.* This is your honor's sword.

Samsthánaka. Ah, very well, give it me. *(Takes it by the wrong end.)* I bear it on my shoulder, sleeping in its pink sheath."†

A belt was usually tied round the waist to suspend the sword, and a sword-knot was not unfrequently put on. Both these were known by the common name of *mekhalá*, which, in the case of women, was very appropriately employed to indicate the zone or girdle. The sword-knot was sometimes formed of a metallic chain fastened to the hilt, and in fighting bound round the wrist to secure the weapon—a procedure which must have proved very troublesome whenever the blade snapped in the midst of a fray.

Daggers, &c.

Of the short sword or dagger, the true war-knife and its varieties, the poniard, the stiletto, and the kuttar, the sculptures of Orissa and Sánchí, afford a great number of examples. Illustration No. 180, from the Great Tower, is very like a Nepalese knife. No. 180 is a broad, blunt-ended knife with a carved deer-head handle; and No. 184, is a knife of the same description, but with a lancet-headed point, taken from a male figure found under a banian tree near the Markanda Tank at Puri. Illustration No. 205 is from the temple of Gaurí. It is a triangular-bladed dagger or cut and thrust knife, which used to be held by the cross bar at the bottom. It belongs to the same class with the kuttar of the present day. Illustration No. 200, is also peculiar; it is from Bhuvanes'vara. In Orissa this weapon seems to have been a great favourite, and on the Great Tower several nude statues in amatory positions are made to carry it in their waist bands. The *sphya* or sacrificial knife of the Vedic times was a dagger; but it was made entirely of wood.

Lasso.

The lasso, *nágapáça*, "the noose of the Nágas," or simply *páça* may also be described as an offensive weapon of the non-missile class. It was largely used, and is frequently alluded to. Of its form and use we extract the following description from the Agni Puráṇa. "The *Páça* should be ten cubits long, with one end of which a circle should be made a cubit in diameter. It should be constructed of the strings made of hemp, or of flax, or of *munja* grass, or of *bhangá* (*Cannabis sativa*), or of *snáyu* (tendon or muscle of beasts, supposed to be what is understood by the word *tant* in common Bengali), of *arka* skin, (fibre of the *Calotropis gigantea*) and other things of which strong thread may be made. The *Páça* should be prepared of thirty pieces of thread twisted together. The learners should make a running knot in the *Páça*; and having held one end of it with the left hand, and twisted it round on the right, they should turn it over their heads, and afterwards throw it on the throat of a human figure, made of wicker work or reeds. They then

* Kern's Translation, Journal Rl. As. Soc. N. S., VI. pp. 81 *et seq.* | † Lit. of the colour of the flesh of barkless raddish. Wilson's Hindu Theatre, I. p. 37.

should do the same to a real man, after covering his body with skin. After this, they should try to throw the string on the neck of a horse at full gallop, or of animals jumping about, or such as are moving fast. This practice should be repeated many times, in order to be accustomed and well-skilled in it. In this manner, being masters of their hands, they will begin to bind (their enemy) with the *Pásha*." This lasso is sometimes exhibited in sculpture. On the Rání Naur frieze at Udayagiri, there are two or three nooses seen on the body of a crouching elephant in a cave, and one also in the hand of one of its assailants ready to throw it on the animal.

Defensive arms, shields.

Of defensive arms the first object which demands notice is the shield. In ancient India it was made of hide; hence its name *charma*, or leather *par excellence*. But hard wood was subsequently used for the purpose; and accordingly the *Yuktikalpataru* defines the *charma* as "an arm which covers or protects the body. It is of two kinds, according as it is made of wood or hide. It should protect the body, and be firm, light and tough. That which is insufficient to cover the body, or is heavy, soft, easily penetrable, or made of an offensive material is defective."* With the Egyptians and the Grecians the material was commonly bull's hide with the hairy side outwards,† and Homer gives seven folds of it to the shield of Ajax, and nine to that of Achilles; but the Hindus preferred the hide of the buffaloe and of the rhinoceros, and their superior toughness rendered folding unnecessary. At a subsequent period metal seems to have been likewise used in the fabrication of shields, and specimens have been met with both of iron and copper. Two of the latter metal are preserved in the Museum of the Asiatic Society, but their ages are unknown.

The shape of the instrument was ordinarily circular, as in the Illustrations Nos. 209 and 210, from the temples of Bhuvanes'vara; but it was not invariably so. Illustration No. 211 shows an oval shield; and oblong shields made of boards, or wicker work covered with leather, with sometimes an iron rim, very like the *scutum* of the Romans, were not unknown; and small bucklers of an oblong or irregular shape were common. The former occur repeatedly at Bhuvanes'vara, (Illustration No. 212, taken from a figure in the Museum of the Asiatic Society of Bengal), and the latter at Sánchí. (Illustrations Nos. 213 and 214, taken from General Cunningham's "Bhilsa Topes.") At Khandagiri there is a shield, the top and sides of which are rectilinear, and the lower part pointed. Judging from the extent of the body it covers, it was probably two and a half feet long, and had a prominent ridge in the middle. At Sánchí, two instruments have been noticed of a similar shape, but without the ridge, the ground of the one being plain, and that of the other bearing a diagonal cross. (Illustrations No. 215 and 216 taken from Fergusson's "Tree and Serpent Worship.") These were, however, never made so big as to entirely cover the soldier, as was the European paviso. Two specimens of this shield, made of wood and shaped very much like canoes with wooden handles,‡ exist in the Museum of the Asiatic Society of Bengal. (Illustration No. 217.) At Bhuvanes'vara some of the circular shields are padded inside, and held by two straps tied to four rings. (Illustration, No. 210.)

The ornaments on these shields were limited to a few metal bosses or stars, probably of brass, and rarely a tassel. But at Konárak, a specimen has been seen which is most elaborately ornamented. (Illustration No. 218.) It is nearly two and a half feet in diameter, bound round the edge with a metal rim, and decorated with an outer band formed of circular plates of metal bearing impressions in relief of men, horses, elephants, deer, fishes, birds, tortoises, lizards, and floral scrolls, and having a scalloped inner edge. A medallion of a chaste design covers the centre, and to it is attached a thick bushy yak-tail chauri; a second chauri of the same kind, but with a differently formed handle, hangs from the top. For distinctive badges it has two well-formed lizards. At first sight, this buckler appears to be a sort of a pageant shield intended more for display on festive occasions than for use; but it was found in the hand of a warrior crouching under a prancing horse, whose rider had dismounted and was ready with a drawn sword to give him the *coup de grace*.

Armour for the head.

Defensive armour for the head has nowhere been noticed in Orissa. The heads of warriors are either left with their natural covering of hair, or bound round with turbans, or surmounted with light, ornamented caps. This is remarkable, considering that even in the early days of the Rig Veda helmets § were greatly prized; and in the Rámáyaṇa and Mahábhárata much praise is bestowed on those who succeeded

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* अतीवावरकं मर्म्म चर्म्म रत्नभिधीयते ।
तत्पुनर्द्विविधं बाह्यपत्रसंघातभेदतः ॥
अतीवावरकञ्चर्म्म लघुना दृढ़ना तथा ।
दुर्भेद्यमेति कथितं चर्म्मदोषं दृढ़ाकृतः ॥
अन्यथा दृढ़ना चैव चर्म्मदोषं दृढ़ाकृतः ॥
विपरीतगुणा चेति चर्म्मदोषं दृढ़ाकृतः ॥
MS. No. 445, in Rájá Jotindramohan Tagore's Library, fol. 20a.

† Wilkinson's Ancient Egyptian, I. p. 290.

‡ Some of the bucklers used during the Pálas were had wooden handles.

§ "The brilliant (Marutí), tossing the lightning in their hands, radiant above all, gloriously display their golden helmets on their heads." Wilson's Rig Veda, IV., p. 251.

in cleaving the helmets *(kiriṭa)* of their adversaries. During the middle ages, the Marháttas used very extensively iron casques with neck-guard, cheek flaps, and moveable nose-pieces; and in the poems of Chand the helmet is frequently mentioned.

Armour for the body is, likewise, wanting at Bhuvanes'vara and Puri. But in Mr. Fergusson's 'Tree and Serpent Worship,' there is a figure from Amarávatí lithographed from a drawing in the Mackenzie collection, (plate LXVI,) which appears as if dressed in a coat of chain-mail; (Illustration, No. 91;) but without a careful examination of the original, its nature cannot be definitively settled. This is, however, scarcely necessary, for there is ample written evidence to prove that formerly metallic coats were in common use, as in Europe during the middle ages, by superior officers and distinguished warriors and chiefs. The Kshatríya or military caste early assumed the distinctive surname of *Varman* or the "mail-clad," and the Sanskrit language includes more than a dozen names for armour for the chest. In the Rig Veda the coat of mail *(kavacha)* is repeatedly mentioned. Thus, Agni is invoked "to blaze (fiercely), repelling repeatedly, like a coat of mail, the enemies of his worshippers in combats."* The As'vins are asked to be "like two dogs, warding off injury to the persons" of his adorers, "and, like two coats of mail, to defend them from decay."† "When the mailed warrior advances in front of battles, his form is like that of a cloud: with his body unwounded do thou conquer; may the strength of the armour defend thee."‡ Again, "I cover thy vital parts with armour:"§ "Slayer of enemies, thou, Indra, art our armour."‖ In none of these and in several other such passages is the material of the armour indicated; but the Maruts are described in two or three places as having "golden breast-plates."¶ Elsewhere the attendants of Kasu, son of Chedi, are described as "wearing cuirasses of leather,"** and in an old hymn in the First Book, Agni is said to defend "the man who gives presents (to the priests) on every side, like well-stitched armour," which Dr. Wilson supposed was a "quilted jacket such as is still sometimes worn."†† This leather, or quilted, coat was probably longer than the chain-mail, and reached the knees. Something like it is described in the following passage from the *Uttara-ráma-charita* in which Janaka expresses his first impression of Ráma:

Armour for the trunk.

"You have rightly judged
His birth: for see, on either shoulder hangs
The martial quiver, and the feathery shafts
Blend with his curling locks: below his breast,
Slight tinctured with the sacrificial ashes,
The deer skin wraps his body: with the zone
Of *Múrva* bound, the madder-tinted garb
Descending vests his limbs; the sacred rosary
Begirts his wrist, and in one hand he bears
The *pipal* staff, the other grasps the bow."‡‡

The picture, however, is ideal, and pourtrays what the poet thought had been the attire, some twenty centuries before him, of a military student in his noviciate, long before he had earned his spurs. It cannot be accepted as a safe guide for any historical conclusion. The great *S'atarudríya* hymn of the *Vájasanyí Sañhitá* of the Yajur Veda, which dates from a much earlier period, is, however, precise on the subject. It addresses Rudra as girt in "cotton-quilted cuirass," and "iron-mail" and "armour."§§ The Rámáyaṇa and the Mahábhárata are more positive on the subject, and state the Kavacha to be an iron armour, though they are silent as to whether the form was that of beaten plates sewed on cloth or leather, or of chain-mail. In the latter, some mail coats are described to be of iron plated over with gold; others white and lined with steel, and studded with a hundred eyes.‖‖ Sanskrit lexicographers are, likewise, universally of opinion that the *kavacha* was made of iron; but they too afford no positive information as to its make. Judging from the prevalence of chain-mail among the Marhattas, I am disposed to think that a shirt of mail formed of small iron or steel rings interwoven was preferred to solid breast-plates; but leather was not altogether rejected. The Marhattas used mail with inlaid plates; and coats of rhinoceros or buffaloe hide boiled in oil were also common.

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* Wilson's Rig Veda, II, 66.
† Ibid. II., 310.
‡ Ibid. IV., 22.
§ Ibid. IV., 27.
‖ Ibid. IV., 80.
¶ Ibid. IV., 300.
** Ibid. IV., 239.
†† Ibid. I., 83.
‡‡ Hindu Theatre, I., 346.
‖‖ "नमो निषिद्धे च कवचिने च नमो वर्म्मिणे च"
Muir's Sanskrit Texts, IV., p. 270.
‖‖ सुवर्णं पृष्ठं सूर्य्याभं सूर्य्यदत्ताभ्यधायतत् ।
हृदभायसगर्भञ्च श्वेतं चर्म्म शताक्षिमत् ॥
Viráṭa Parva, Chap. 31.

Allusion has already been made to the forearm guard noticed in the Vedas (*ante* p. 120). In the Mahábhárata, it is also mentioned, as also a visor,* but there is no name in Sanskrit for shoulder, leg and thigh guards, or other article of defensive equipment. The Marhattas had a large steel gauntlet, but it has no ancient name.

Flags, trumpets and war-cries.

Immediately after arms and armour it would not be amiss to notice three objects, which, though perfectly harmless by themselves, exercise the most potent influence in warfare, *viz.* the flag, the trumpet and the war cry. As a rallying point for soldiers in action, or for the assemblage of troops, the flag is of the highest importance, and a feeling of chivalrous devotion to it has at all times been cherished as a point of military honor. "The idea of such a signal," says an able writer on the "Scope and Uses of Military Literature and History," "is universal, and the external cause of its adoption obvious. However little accustomed men may be to act in concert, it is always possible to unite them in one mass by the conspicuous display of a striking object in a central position. If the uplifting of this ensign be accompanied by the shout of a strong-voiced man, or the commanding tone of a loud instrument, the appeal to two organs of sensation, both the ear and the eye, must be followed by an increased degree of alertness on the part of the troops so summoned" (p. 159). The Hindus, from a very early period in their history, availed themselves of all the three, *viz.* the standard, the war-cry, and the trumpet, or what was the same, some instrument for creating shrill wide-spreading sounds. The Rig Veda alludes to banners,† and in the Mahábhárata, the heroism of knocking down the enemy's standard is everywhere highly extolled. The war-cry is, likewise, mentioned in the Rig Veda,‡ and in the great epics. The words used were either religious sayings, or the name of the leader added to the word *jaya* or victory, such as *jaya Ráma*, "victory to Ráma," or *Jayatu Pánduputränám*, "success to the sons of Pándu," or some other word suited to the occasion, very much in the same way as in Europe, and whence, as Sir S. Meyouk supposes, armorial mottoes had their origin.

According to the Rig Veda, the most ancient instrument for calling troops together or conveying orders to them or exciting them to valorous deeds was the drum. Thus: "War drum, fill with your sound both heaven and earth; and let all things, fixed or moveable be aware of it: do thou, who art associated with Indra and the gods, drive away our foes to the remotest distance. Sound loud against the (hostile) host: animate our prowess: thunder aloud, terrifying the evil-minded: repel, drum, those whose delight it is to harm us: thou art the fist of Indra; inspire us with fierceness. Recover these our cattle, Indra; bring them back: the drum sounds repeatedly as a signal: our leaders, mounted on their steeds, assemble: may our warriors, riding on their cars, Indra, be victorious."§ But Vyása, in the Mahábhárata, does not allude to it. He replaces it by *páñchajanya*, and other forms of conch shells, with which the heroes of the Great war of Kurukshetra rallied their several corps d'armée.‖ The conch shell, however, was not unknown in the time of the Rig Veda, and Kusta refers to "those appliances with which the As'vins sound the conch shell in the battle for their share of the booty."¶

In the most ancient sculptures, such as those of Sánchi, the flag is represented as an oblong piece of cloth with or without diagonal crossed stripes like a St. George's cross, or a number of stars. (Illustrations Nos. 219 and 220, copied from Cunningham's Bhilsa Topes). At Bhuvanes'vara, it is invariably triangular and of plain ground. The staff is surmounted, according to the religious faith of the people who bore it, by either a trident or a discus. In ancient literature mention is made of Garudas, Hanumánas and crescents, as mountings for the tops of flagstaffs; also as armorial emblems on the ground of the flags. "Thus Aryuna's flag bore the monkey Hanumána, Bhishma's a palm tree, Daryodhana's a serpent, Kripa's a bull."** The last was also the emblem of Síva whence his name *Vrishaketana* or "bull-flagged." The Harivansa makes mention of birds painted on the ground of flags, and in the Rámáyana, Janaka has the title of *Sítádhwaja*, from his standard having borne the figure of a plough. The Agni Puráña makes a distinction between the large standard *dhwaja* and the banner *patáká* of minor divisions.†† It notices, likewise, particular colours as belonging to particular chiefs. The Kumára Sambhava describes flags of China silk set up in the palace of the mountain king Himálaya on the occasion of his daughter's marriage.‡‡ But ordinarily,

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* Dronáchárya, when wounded, is said to have raised his visor, and Aryuna took the opportunity to send an arrow to his face which proved fatal.

† Wilson's Translation, I., 265, II., 11, 321, IV., 145—266.

‡ Ibid I., 105.

§ Ibid III., 476.

‖ Very different was the use to which Poseidon assigned the *Conche*, when he employed his son Triton to blow it to soothe the restless waves of the sea.

¶ Rig Veda, I., 287.

** Wilson's Works, IV., 206.

†† प्रमाणदण्ड तु विस्तारः मानं दण्डस्य कीर्तितं ।
शिखराजेन वा कुर्यात् मणिहाटेन वा पुनः ।
धारयेत् दैवतं दिव्यं दण्डं वा परिकल्पयेत् ।
ध्वजवद्विर्दण्डवत् पेताकां वापरे यथा ।
चीनां वा अन्य कुर्यात् विचित्रैश्च चर्चितं ।
एवमाचारविहितं ध्वजं शस्त्रमाहवे ।
दण्डाधारस्तु विहितः ध्वजं शस्त्रमाहवे ।
मणिमाणिक्यवैदूर्यैः विचित्रैश्च तु ।
मयूरपक्षः मकरः कार्यः सौवर्णकेतनः ।
अन्ये चापि विशेषाः [illegible]
[illegible] अध्यायः ६१ पद्ये ।)

‡‡ सभालक्ष्मीकीर्णमणिप्रभं सकोशमुक्तैः कलिनकेतुमालः ।

I suppose, cotton cloth was the material used. In the Shâhnâmeh the leather apron of a blacksmith is made to do duty for a banner, and Ovid notices a bundle of hay used for that purpose. Among the Egyptians, figures of birds, beasts, and reptiles mounted on long poles served the same end, but the Hindus seem to have invariably used cloth; at least there is nothing to show to the contrary. Graven stones do not, however, help us much in the matter.

Of trumpets, mention has already been made when treating of musical instruments. It has nowhere been seen used singly as a military call-bell, but as a member and an important one, of military bands it is frequently noticed in Sanskrit writings, and occurs likewise in sculptures. The conch shell is common, and may be seen in the hands of Vishṇu and Devî everywhere; a large specimen noticed at Bhuvanes'vara has been figured in Illustration No. 173.

Next to arms and armour, the most important requirements of ancient Indian warfare were horses and elephants.

Horse.

Probably when the Aryans first came to India, they depended upon their horse, with a very superior breed of which, the progenitor of the modern Arab horse, they were familiar in their primitive homes in the plateau of Central Asia. In India, they subjugated the elephant; but soon after both the horse and the elephant held a lower position than the chariot, though in the time even of the Mahâbhârata, elephants disputed the supremacy with cars, and such distinguished chiefs as Bhagadatta, Uttara, Duryodhana, Anvinda and others, issued forth to battle, mounted on their elephants. At the time of Alexander's invasion, elephants had all but completely superseded cars, for the Greek historians, while dwelling largely on the mighty phalanx of king Porus' elephants say nothing of his war-chariots: this may, however, be accounted for on the supposition that the elephants were novel and startling, whereas the car was familiar to the Greeks, and on the whole not very dangerous to them. The Hindus knew exactly the purposes for which horses and elephants were most valuable, and placed them in the wings of their army, where they could be manœuvred without interfering with the action of the infantry in the centre, on which they depended, as the mainstay of military arrays. They also wrote several treatises on the management of those animals in health and disease. Unlike most other nations of antiquity, they employed the horse in war, both for the draught of their chariots and for the saddle, and that from the very earliest period of which we possess any notice. Driving was perhaps more fashionable than riding, for the principal heroes always appeared in battle, as among the ancient Assyrians* and Egyptians, on chariots, and prized themselves on being *rathis* or owners of cars. Mounted troops, however, were more common, and in the Rig Veda Agni is in one place invoked "to come mounted on a rapid courser,"† and in another place is likened to "a rider-bearing steed."‡ The As'vins made Pedu "mount a swift charger."§ Madhuchhandas, son of Vis'vâmitra, prays that he may, "under the protection of Indra, repel his enemies, whether encountering them hand to hand, or on horseback."‖ The horse was, likewise, used as a beast of burden, and the As'vins are accordingly invoked to come to the sacrifice "with viands borne on many steeds."¶

Of the particular breed of horses the Hindus used before the Christian era, we possess very little information. The Vedas praise highly a species called *Nagut*. Subsequently the most noted and highly prized was a Central Asian race called *Bâhlika* or of Balkh.** Guzerat, Beluchistan, Kâmboja,†† (ancient Cabul) and Persia, also yielded many hardy animals, which were generally esteemed by the heroes of the great war of the Mahabhârata. Of their likeness, however, we have no remains in stone. The horses figured at Sânchi, Amarâvatî and Bhuvanes'vara are so much alike, that it is impossible to decide upon their caste.

The favourite colour in Vedic times was the bay, and perhaps also the chestnut or the colour of the sun, *aruṇa*. This is what was to be expected, for the Central Asian sire of the Arab was a bay. In one or two places the sun is described as having glorious white horses; spotted mares, (dapple greys?) are also alluded to,‡‡ but subsequently, milk-white coursers were preferred. In the Lalita Vistara,§§ the dark grey of the colour of the cloud (iron-grey) is most extolled as befitting an emperor.

The equipment for saddle horses, as seen in sculptures, consist generally of a thick large padding kept in its place by a girth, a croupière, sometimes trellised, and a breast band, and covered over with a housing or saddle cloth of a rich pattern. Nothing like a wooden saddle is anywhere perceptible,

Saddle and bridle.

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*"The chariots appear to have been used by the King, and the highest officers of State, who are never seen in battle on horseback; or except in sieges on foot." Layard's Nineveh II., 348.

† Wilson's Rig Veda, II., 220.

‡ Ibid I., 179.

§ Ibid IV., 154.

‖ Ibid I., 20.

¶ Wilson's Rig Veda, I., 78.

** Ibid IV., 137.

†† Mahâbhârata Sabhâ Parva.

‡‡ "Maruts, together worshipped with sacrifices, standing in the car drawn by spotted horses, radiant with lances, delighted by ornaments." Wilson's Rig Veda, II., 303.

§§ Lalita Vistara, p. 17.

and stirrups are also wanting. This is, however, not the case with padded saddles on lions; at Bhuvanes'vara they are invariably provided with well-formed stirrups, and human feet are represented thrust in them. In a piece of sculpture, apparently of an old date, in the Museum of the Asiatic Society, there are distinct delineations of stirrups formed of a ring with a broad, flat foot-rest. They are hung with straps proceeding from under the saddle-cloth or pad. The bridle includes a forehead strap, cheek pieces, gullet, and nose band, all studded with metal bosses. Tassels near the ears are frequently met with. A chamfron, sometimes straight, and sometimes crossed, is also generally added, and a martingale of cloth is not uncommon. The rein is single and plain, never studded as the other parts of the bridle are. It was most probably knotted or sewed on the bit, but in a piece of sculpture in the Museum of the Asiatic Society brought from Bhuvanes'vara, the joint displays a chaste floral ornament, most likely the representation of a metal boss, occupying the place of the buckle. (Woodcut No. 53.) A positive buckle in the sense in which the word is now understood I have nowhere met with in ancient Indian sculptures, nor a description of it in Sanskrit literature.

No. 53.

Snaffles.

The form of the bit is not perceptible, but rings are occasionally seen which suggest the idea of a snaffle; and the Agni Purâṇa recommends five different kinds of snaffles as the most appropriate. One of these is said to have been wavy *(gomutra)*, another, crooked *(kuṭila)*, a third, twisted or plated *(veṇi)*, the fourth, a chain of lotuses or rings *(Padmamaṇḍalamâlâ)*, and the fifth, jointed *(garbhika)*. These are very different from what Arrian describes in his Indica. He says, "The Indians have neither saddles nor bridles, like those which the Greeks and Celts make use of; but instead of bridles they bind a piece of raw bullock's hide round the lower part of the horse's jaws, to the inner part of which the common people fix spikes of brass or iron, not very sharp, but the richer ones have them of ivory. Within the horse's mouth is a piece of iron like a dart to which the reins are fastened."* Commenting on this passage, Mr. Fergusson observes, "If this was the mode employed by the Indians in Alexander's time, they seem to have benefited by their intercourse with the West before the Sânchî sculptures were executed. If any one will compare the head stalls of the bridles represented in the plate (XXXIV.) with figs. 6, 7 and 8 of Plate III., they will see how perfect the head gear of these horses had become."† In the absence of positive proofs to the contrary, it is of course futile to question the statement of Arrian, or the accuracy of the deduction drawn from it; but it seems rather unaccountable, why the people, who guided their horses by putting an iron dart inside the mouth and tying the reins thereto, should put a spiked band on the nose? Not being attached to the reins, it could serve no useful purpose in checking the horse, and the idea, therefore, suggests itself that it was the martingale with its studded nose-piece which Arrian mistook for a substitute of the bit. As to the effect of Alexander's transient visit, all we have to say is that, intercourse with Europeans for near three centuries, and a century of English domination, have not yet made the Hindustani exchange his *chârjâmâ* or pad for the wooden saddle. If it be impossible to suppose that the Indian Aryans had the capacity to design a bridle for their horses which they brought with them from the plateau of Central Asia, at least two thousand years before Christ, and used from time immemorial, and a model be really required for them to copy, the Assyrians or Persians were more likely to afford it than Alexander or his successors, the Greco-Bactrians. Looking at the caparisoned horses in Layard's plates, and comparing them with similar figures in Khandagiri and Sânchî, one sees a great deal of similitude to form a conjecture; a close examination, however, brings to light many marked peculiarities which leave no room for doubt as to their origin being different. The mode of dressing the mane and forelock was also different. The Assyrians hacked the mane, or braided it. No Indian ever hacked the mane, but braiding was not unknown. In our days it is common enough. The Hindus dressed the forelock in the form of a flowing arching crest; the Assyrians tied it in three tiers or in three separate tufts. Sometimes the bulk of the forelock in India was increased by the addition of false hair, and the following passage from the *Vikramorvashî* of Kâlidâsa describes a yak-tail crest:

> "The waving chowrie on the steed's broad brow
> Points backward, motionless as in a picture;
> And backward streams the banner from the breeze
> We meet—immoveable."‡

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* Indica, Chap. XIV.

† Tree and Serpent Worship, p. 134. In support of this deduction Professor Weber's conjecture of the Sanskrit word for a snaffle, *Khalasa* (W. takes it for the bridle) being derived from the Greek χαλινος, may be quoted. But the admission by Arrian of the use of an iron bit, and the fact of reins for horses being mentioned in the Rig Veda are adverse to the theory.

‡ Wilson's Hindu Theatre, I., p. 100.

Armour for horses.

In one or two instances, I noticed something like a crinet on the neck, but in the absence of iron accoutrement of other kinds, I imagined it was due to a peculiar style of dressing the mane. In Rájputaná there are several sculptures of complete suits of iron armour including the chamfron, the crinet, the gorget, the *poitrel*, the *croupière à jupe*, and the leg-guard; but they are of the middle ages, and were probably copied from the chargers of the Moslem invaders. I have nowhere met with a name for iron shoes for horses; but a passage in the Rig Veda referred to above, (p. 119), suggests the idea of such shoes.

Harness for draft horses.

The harness for draft horses in the olden time included a body-roller, a collar and a bridle. The body-roller was apparently plain, and tied where, in our times, the surcingle is buckled; but without any padding or cloth underneath; differing in this respect from the Assyrian harness, which always included a rich saddle-cloth.* It was intended to prevent the traces from hanging low when the horse was checked, or backed. The collar was light below, but heavy at top, something like the wooden frames which were until recently used for keránchí tattoos. In fact, the idea of a collar was derived from a bullock's hump, and the contrivance was designed with a view to give a false hump to the horse, and the traces were so adjusted as to throw the weight much higher up than the point which bears the greatest strain under an ordinary collar. The remnant of this hump is represented in English dray horse-harness by a semicircular piece of leather on the top of the collar, and until recently it also appeared prominently in gig harness. The Egyptian harness-saddle was designed in the same way, placed on the highest point of the withers, and kept there by two bands, one forming a collar, and the other a girth. This was also the case with the ancient Greek harness, in which the yoke was tied on the withers by two bands, one of which served the purpose of a girth, the other, the λέπαδνον, was, according to Arnold, "a broad strap which fastened the neck of the horse to the yoke." The Assyrian breast-band, as described in the note below, was very much of the same kind. The Egyptians, the Greeks, and the Assyrians, however, differed from the Indians in making their horses draw their chariots by a yoke, while the latter depended on traces, and had no yoke. Wilkinson says, that the former "had traces, but on the inner side only." Such traces could not have been very effectual either for steady draught, or for preventing the horses from falling out, and the main dependence must have rested on the yoke, which he adds "sufficed for all the purposes of draught, as well as for backing the chariot; and being fixed to the saddle, it kept the horses at the same distance and in the same relative position, and prevented their breaking outwards from the line of draught."† In Indian rich trappings, a trellised croupière was added to serve the purpose of a kicking-strap, but it was not common. The bridle differed in no respect from what was used for saddle horses, except, perhaps, in having gaudy plumes and rosettes over the head, and by the ears.

Elephant trappings.

The housing for the elephant, like that for the saddle-horse, consisted of a thick padding covered over with a piece of carpetting, or embroidered cloth, or trapping of some kind or other, and a smaller one of the same style for the neck; the former held to its place by girths, croupière and kicking-straps, and the latter by ropes tied round the neck. By way of ornaments, strings of bells round the neck and the rumps, and pendant from the head, were freely employed. In some cases metallic chains were used instead of ropes; but this was not common. (Illustrations Nos. 29 and 30.) No howdah has anywhere been met with; but in the Agni Puráṇa allusion is made to one "which should be made of wood cut out of trees that emit a milky sap when wounded; it should be fifty fingers broad, and three cubits long, painted and decorated with gold;" and Professor Wilson says, "the more usual riders on elephants were soldiers of a lower grade, several of whom were placed on the animal's back in a kind of chair or howdah, and were armed with bows and arrows and other missiles. According to Megasthenes, as quoted by Strabo, each Indian elephant carried three archers besides the driver, and his account agrees well enough with what may be inferred from incidental notices of Sanskrit writers."‡

Chariots.

The oldest Indian car of which we have a drawing occurs among the paintings of the reign of Thothmes III., (B. C. 1495). It is said to have been a present from a vanquished people of the name of *Rot-u-ṇo*, Sanskrit *Rathina* or "charioteers," who have been identified by the late Henry

* The following is Mr. Layard's description of the earliest Assyrian harness: "Round the necks of the horses were hung tassels, rosettes, and engraved beads. Three straps, richly embroidered, passing under the forepart of the belly, kept the harness and chariot pole in their places. A breast-band, adorned with tassels, was also supported by these straps. To the yoke was suspended a very elegant ornament, formed by a head of an animal, and a circle, in which was sometimes introduced a winged bull, a star, or some other sacred device. It fell on the shoulder of the animal, and to it was attached three clusters of tassels. Embroidered cloths, or trappings were frequently thrown over the backs of the chariot-horses, and almost covered the body from the ears to the tail. They were kept in their place by straps passing round the breast, the rump, and the belly." Layard's Nineveh, II., 354.

† Ancient Egyptians, I., 353.

‡ Essays, II., 295.

Torrens, author of the *Scope and Uses of Military Literature*, with the Vedic Aryans of the Pánjab.* In style and make it closely resembles the war chariot of the Sánchí bas-reliefs, a car on two wheels, with a curricle body, open behind, and drawn by two horses; but it has only one pole with a yoke at the end, whereas the Sánchí specimens have three or rather one long pole in the middle curving upward near the neck of the horses, and two short shafts on the sides, reaching only as far as the flanks, but no yoke.† (Woodcut No. 54.) For a two-horse conveyance this is the simplest contrivance, and the ordinary practice was to drive pairs, in the matching of which, great attention was paid by their owners.‡ But one-horse chases were not altogether unknown; perhaps they were more common, but not being worthy of laudation were not often noticed in the Rig Veda hymns, though in one place we find a verse beginning with the words: "This invigorating praise, like a horse attached to a car, has been addressed thee, who art mighty and fierce."§ The Rámáyaṇa makes mention of cars drawn by asses. In the time of the Rig Veda, there were three shafts to each car, and they are described as triangular. "Come As'vins with your three-columned triangular car."‖ "We have placed you, Dasras, in your golden three-shafted chariots, going by an easy road to heaven."¶ But whether the triangle was formed by the projection of the long central pole or by the body itself, does not appear. The wheels were usually two, but a third was sometimes added, as tri-wheeled carriages are greatly extolled. The chariot of the sun is described in the Puráṇas as having one wheel, one having been taken away by Indra. The ancient Roman chariot had large scythe-like blades projecting from the axles, rendering approach to the cars from the sides by enemies dangerous. A similar method of arming the wheels was probably adopted by the ancient Hindus, for we read in the Rig Veda, of "golden wheels, armed with iron weapons."** But the Sánchí models show no trace of these. The number of spokes to each wheel was originally five;†† but a greater number was subsequently introduced, and in the Sánchí chariot above shown there are sixteen. The earliest Assyrian and Egyptian chariots had six.

No. 54.

Ordinarily the body was made of a wooden framework, covered with leather,‡‡ and open above like that of a tandem; but sometimes an awning on top was put upon three posts, and the whole surmounted by a flag. The Mahábharata describes a square body with four posts, like the modern ekkás of northern India. It is possible that both styles were common during the Vedic epoch. In the Sánchí specimens the accommodation available in these vehicles was barely sufficient for two persons to stand or sit side by side. The Grecian Διφρος, as its name implies, was intended only for two persons; and the Roman bore only the *bellator*, or warrior, and the *auriga*, or driver. The Egyptian could carry three persons. The sculptures of Assyria and Persia show no more than two persons in each. But the Rig Veda allades to three benches as fixtures in each car, and the space sufficient for several persons and some goods.§§ The Rathas of the Rámáyaṇa and Mahábhárata were, likewise, large and commodious, and generally carried a large supply of arms, differing in this respect from those of Egypt, Persia and Greece, which never had any covering, awning or hood, and were seldom large enough for more than three persons, all standing or seated abreast on one bench. The Grecian chariot, though differing in some respects in the make of its wheels, poles, &c., from the Vedic model, bore a close relation to the Sánchí examples; and to make that manifest, I shall here quote Homer's description of the curricle of Achilles.

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* Mr. Layard does not subscribe to this. He quotes Mr. Birch, who "is inclined to identify the Ruten-nu or Lodan-nu, of the statistical tablet of Karnak with the Cappadocians, or Leuco-Syrians, inhabiting the country to the North and South of the Taurus, who, he conjectures are also represented at Khorsabad." He adds: "That the Ruten inhabited a country adjoining the Assyrians, may be inferred, from their being mentioned in geographical lists between Naharaina, (Mesopotamia) and Singara (Sinjar)." Layard's Nineveh, II., 405.

† By a curious mistake on the part of the artist, the outer trace in Mr. Fergusson's drawings, plates III., XXXIV. and XXXVIII., is tied to the tail of the horse. In plate XXXV., it is made to go round the rumps like a kicking-strap. In plate XXXIII., the form of the shaft is unmistakable, but it is made of a piece with the periphery of the wheel. In the woodcut above given, the true form has been attempted to be restored.

‡ The old Assyrian chariot had three horses, and in this respect differed from the Indian and Egyptian which had two. Layard's Nineveh, II., 350.

§ Wilson's Rig Veda, IV., 151.

‖ Ibid I., 126.

¶ Ibid II., 60.

** Ibid I., 226.

†† Ibid III., 475.

‡‡ Ibid IV., 73.

§§ The following extracts from Wilson's Rig Veda contain [illegible] to the form and appurtenances of the Vedic car. "Let your [illegible] and [illegible]-rayed chariot, Mitra and Varuṇa, blaze before them, like the sun, filling them with fear." (II., 6.)

"Showerer of benefits, harness the car which has three benches, three wheels, and is [illegible] as thought; with which, embellished with three metals, you come to the dwelling of the pious worshipper, and in which you travel like a bird with wings." (II., 184.) "With that chariot, lords of men, which is your vehicle, which has three benches, is laden with wealth," &c. (IV., 153.) "Conduct here, As'vins, your radiating wealth-laden chariot." (IV., 153.) "Agni, kindled into flame, come to our presence in the same chariot with Indra, and with the swift gods." (II., 331.)

"Ἤβη δ' ἁμὲ' ὀχέεσσι θοῇς βάλε καμπύλα κύκλα,
χάλκεα, ὀκτάκνημα, σιδηρέῳ ἄξονι ἁμὰ.
τῶν ὕπερ χρυσείη ἶτυς ἄφθιτος, αὐτὰρ ὕπερθε
χάλκεαι ἐπίσσωτροι πρόσαρμοι, θαῦμα ἰδέσθαι·
πλῆμναι δ' ἀργύρεαι εἰεν περίδρομαι ἀμφοτέρωθεν.
δίφρος δὲ χρυσέοισι καὶ ἀργυρέοισιν ἱμᾶσιν
ἐντέτατ' ἀμφὶ δὲ περίδρομοι ἔντεγες εἶεν.
τοῦ δ' ἐξ ἀργύρεος ῥυμὸς πέλεν· αὐτὰρ ἐπ' ἄκρῳ
δῆσε χρύσειον εὐκὰν ζυγόν, ἐν δὲ λέπαδνα
κάλ' ἔβαλε, χρύσεα· ἔπὸ δὲ ζυγὸν ἦγαγε Ἥρη
ἵππους ὠκυπόδας, μαρναμένους ἐρύσασά τε."

Iliad, c. 722—732.

On the whole, it may be well said that the ordinary war chariots of the six great nations of antiquity, Indian, Egyptian, Assyrian, Persian, Grecian and Roman, were very much alike, though not without peculiarities to mark their ethnic relations. The many-wheeled car, such as that of Jagannátha, has nowhere been met with; but a square platform set on four wheels, and having an awning on four posts, occurs on the temple of Halabeed in Southern India, and this is, perhaps, the first germ of the more elaborate structures of the present day.

The ancient chariots were highly prized, and great pains were taken to embellish them in a manner befitting the rank of the owner. In the Rig Veda, they are frequently described as of "gold," or golden. One is described as ornamented with "three metals;" supposed to have been gold, silver and copper; others as having gold fellies, or wheels, and golden trappings. "The Pajras, the kinsmen of Kakshivat, rub down the high-spirited steeds decorated with golden trappings."* "Harness with traces to thy car, thy long-maned ruddy (steeds to come) to the sacrifice."† "Sávitrí has mounted his high-standing chariot, decorated with many kinds of golden ornaments, and furnished with golden yokes."‡ "Indra, the abounding in acts, the bountiful, has given us, as a gift, a golden chariot."§ "May Indra bestow upon me ten handsome golden chariots."‖ "Ascend, Asvins, your sky-touching chariot with golden seat and golden reins. Golden is its supporting shaft, golden the axle, both golden the wheels."¶ "Rapid as thought (come) with your golden chariot drawn by quick-footed steeds."** "Dasras, riders in a golden chariot, drink the sweet beverage."†† Many other passages like these may be easily cited to show, that the Vedic chariots were generally very richly ornamented. The Rámáyana and the Mahábhárata, in the same way, talk of pearl fringes and jewelled decorations for the chariots of great chiefs and distinguished warriors; and flags and banners for their tops were held in great requisition, and the glory of knocking down a banner from the top of a car was highly esteemed. The Puráṇas are even more fulsome in their praise of the ornaments of ancient Indian cars, but their descriptions lead me to suppose that their ideal of a car was the *ratha* of the modern times, a tower-like structure of many storeys, mounted on a number of wheels, a very cumbrous apparatus altogether, utterly unfit for warlike purposes, and not founded on the model of the Sánchí chariot. Thus the Bráhmavaivarta Puráṇa, in describing a chariot of Vishṇu which certain Bráhman women beheld descending from the sky, says: "It was a most excellent car, made of gold, mounted with mirrors made of crystals, covered over with jewels, furnished with posts made of precious stones, capped with *kalasas* of valuable jewels, having white yak-tail chauris hanging from different places, lined with cloth pure as fire, bedecked with garlands of Párijáta flower, mounted on a hundred uniform wheels, quick moving like thought, and most charming."‡‡ The Devi Puráṇa thus describes a car for the goddess Durgá, who, it seems, was formerly taken about in a car much in the same way as Jagannátha is in the present day, and Buddhist relics were in former times: "The posts should be made of ivory, mounted with showy golden ornaments, and set with rubies and other jewels. The car of the goddess should have seven magnificent storeys, with curtains of silk cloth and mountings of crescents, and decorated with bells, large and small, gongs, *chámaras*, rings, pennons, flags, and looking-glasses. Such a car

* Wilson's Rig Veda, II., 18.
† Ibid II., 235.
‡ Ibid I., 98.
§ Ibid I., 77.
‖ Ibid IV., 5.
¶ Ibid IV., 238.
** Ibid IV., 239.
†† Ibid IV., 253.

‡‡ रत्नखिन्नवरे मध्ये हातकुम्भपरिष्कृते वरे।
ददर्श त्रिपथगेयं दशनं ननन्दह ॥
रजतदण्डसंयुक्तं रजतारपरिच्छदं।
रजतभूमिसंयुक्तं षड्रत्नकलशोज्ज्वलं ॥
चेलचामरसंयुक्तं मणिमुक्ताप्रकाशितं।
पारिजातप्रसूनानां मालाजालविराजितं ॥
शतचक्रसमायुक्तं मनोवायुमनोहरं।

should first be worshipped, Indra, with flowers of the Jessamin tribe, and the Pârijâta, with agallochum and sandal paste, with the aroma of fragrant pastiles, and then the image of the goddess should be placed in it."*

Nor was this fondness for the decoration of their chariots a peculiarity among the Hindus. The other great nations of ancient times were equally ardent in their desire to display their wealth and consequence by profusely ornamenting their cars. "The later chariots of the Assyrians," says Mr. Layard, "were often completely covered with ornaments; those represented on earlier monuments had a very elegant moulding or border, round the sides. They were probably inlaid with gold, silver and precious woods; and also painted. Such were the chariots obtained by the Egyptians from Naharaina, (Mesopotamia), fifteen centuries before Christ. In the statistical tablet of Karnak are mentioned thirty chariots worked with gold and silver with painted poles as brought from that country."† These, as already shown above, are believed by a competent archæologist to have been of Indian origin, (*ante* p. 130). Much of the precious ornaments mentioned by Sanskrit writers was doubtless, due to lively fancy and poetical imagery; but their descriptions imply a substratum of some ornament in addition to the absolute constructive requirements of the vehicles. What those ornaments exactly were, it is of course impossible to ascertain; but the frequent mention of gold and precious stones as materials of decoration, would suggest the idea of their having been to some extent used, the rest being made up of brass knobs and plates, many-coloured cloths, fringes of netting, and tassels. Such ornamented chariots were intended for ordinary use, and they were also provided with hoods or coverings, tops and screens for protection from sun and rain, and other appliances. In the Dictionary of Amara Sinha, separate names are given for such vehicles, such as *Dvaipa* and *Vaiyâghra* for cars having coverings of tiger skins; *Pândukambalya*, *Kâmbola*, *Vâstra*, for woollen-covered cars; *Pushparatha*, non-military car, &c. Hemachandra, in his Sanskrit vocabulary, enumerates several kinds of chariots adapted for various purposes of life. The names he gives are *Sataṅga-ratha*, *Syandana-ratha*, *Pushpa-ratha*, *Marud-ratha*, *Yogya-ratha*, *Purighâtika*, *Karni-ratha*, and *Rathagarbhaka*. The first two were intended for proceeding to the battle-field; the third for enjoyment; the fourth, for carrying about images of gods; the fifth, for magistrates; the sixth, for travelling; the seventh, for fighting; and the eighth, for ascending in the air. How these several vehicles were constructed, and in what respects they differed from each other, the author does not notice. Most of the words have been used in Sanskrit literature as synonymous terms; in the Râmâyaṇa, the Pushpa-ratha has been assigned to Râma for his journey from Ceylon to Oudh; and the *Vaiṇâyika*, which appears like an epithet for *Jogya-ratha* in the passage quoted,‡ is explained by Professor Wilson as a war chariot, and not a state carriage. It may fairly be presumed that the various names given in the vocabulary are not synonyms, but terms denoting vehicles differing from each other in shape, size, make, and character, and that vehicles of various kinds, large and small, were in use among the ancient Hindus, though we are not in a position now to point out their distinctive peculiarities. Covered carriages are frequently mentioned, and, seeing that the constructive ingenuity necessary for converting an open cart into a covered vehicle is exceedingly small, there is no reason to doubt the former existence of such conveyances. It is worthy of note, however, that in the Sânchî bas-reliefs, the open war-chariot shown above in the woodcut is the conveyance selected for a religious procession, and the sacred object placed in it is shielded from the rays of the sun by an umbrella held over it. It may be asked, had the people conveyances with hoods or awning for use at the time, why should they have rejected them and brought forth so insignificant a vehicle for a ceremony, the main object of which was to produce a grand impression on the minds of the common people? A large covered van or car is far better adapted for decoration and show than an ancient war chariot, and the testimony of the Râmâyaṇa and the Mahâbhârata leaves no room for doubt that such large structures were known. To reconcile this conflict, I can only suppose that custom—and custom in matters of religious ceremonies is all-powerful—must have decided in favour of the war chariot. In the beginning of the fifth century, Fa Hian, however, found in Behar something very like the modern rath used in carrying about Buddhist images in religious processions. He says, "Every year, in celebration of the eighth day of the moon *mau*, they (the people) prepare four-wheeled cars, on which they erect bamboo stages, supported by spears, so that they form a pillar two *chang* high, having the appearance of a tower. They cover it with a carpet of white felt, upon which they place the images of all the celestial divinities, which they decorate

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* दत्त्विन्द्रमथैरावतं सुशोभनैः ।
निश्चित्यपद्मरागादिभिरभिपरिष्कृतम् ॥
रथमेनं कारयेत्तत्र शक्रमिमं मन्त्रतः ।
शुक्लमाल्यवस्त्रमलंकारपरिष्कृतम् ॥
षष्टाधिष्ठितमद्वाग्रं चामरैरुपशोभितम् ।
पताकाध्वजशोभाढ्यं दर्पणैरुपशोभितम् ॥
मं रथं पुष्पवेष्टक आलोढ्यसमन्वितः ।
परिक्षिप्तः कपोतैश्च पक्वकैरभ्यलंकृतः ॥
शुक्लमृत्तिकया लेखां देवतां तत्र निवेशयेत् ॥

† Layard's Nineveh, II., 352.

‡ युद्धार्थे यज्ञयात्रार्थे [illegible] रथः ।
यद्धोद्यतः पुमान्देवो [illegible] ॥
यात्रोत्सवे वैमानिकोऽन्यः [illegible] ।
कर्मोत्सवः प्रवरः [illegible] ॥

with gold and silver and coloured glass. Above they spread an awning of embroidered work; at the four corners are chapels, having each a Buddha seated with Bodhisattvas standing beside him."*

The driver of the chariot, among all the six races, generally occupied the left side; but they never held the subordinate position which Jehu does in the present day. Looking to the manner in which Homer makes his heroes treat their charioteers and the familiarity which a driver is represented as taking with a son of the Great Rameses, Sir Gardener Wilkinson thinks "that we may conclude that the office in Egypt and Greece was filled by persons of consideration, who were worthy of the friendship they enjoyed."† In India, in the same way, the *sárathi* was always held in high respect, and even the great Krishna did not think it unbecoming his dignity to become the charioteer of Arjuna. Arjuna, on his part, acted in the same capacity for Uttara, son of Viráta; and Mátuli, the sárathi of Indra, is represented as an adviser in many points to Rama and Dyushanta.‡ Other charioteers seem to have enjoyed equal distinction. In fact, the warriors and the charioteers were either men of nearly equal rank, and both joined "in the labours and glory of the fight," or the office was awarded "as a mark of distinction and trust" for distinguished service. Hence it is that the art of chariot-driving was held as an important gentlemanly accomplishment, and the heroes of ancient days always prided themselves upon their proficiency in it.

The numbers of chariots employed for military purposes were great. According to the Amarakosha, every battalion *(vâhini)* of four hundred and five foot soldiers included eighty-one cars and two hundred and forty-three horse; three such battalions formed a *pritaná*; three *pritanás* formed a *chamu*; three *chamus* constituted an *anikini*; and ten such *anikinis* an *akshauhini* or complete brigade, including twenty-one thousand eight hundred and seventy cars, the same number of elephants, sixty-five thousand six hundred and ten horse, and one million nine thousand three hundred and fifty foot soldiers. It is doubtful if any prince had anything approaching to such a mighty host for his *corps d'armée*, but the arrangement and nomenclature in a dictionary indicate that large assemblages of cars were not quite uncommon.

If this be admitted it must follow that roads for such vehicles were also extant. The great epics describe urban roads as wide and spacious, lined on both sides with shops of various kinds and private mansions of elegance and beauty. The Rámáyana notices the practice of watering the street to allay the dust, (ante p. 21), and refers to a large trunk road extending from Oudh to the Panjab. The Vedas also make mention of roads for cars and waggons, and they offer very strong presumptive evidence of a settled, civilized life among the people as distinct from a nomadic or purely pastoral existence. It is impossible to say whether the roads were ever metalled with stones or bricks: perhaps they were not; but in a country so abounding in kankar, as the North-Western Provinces are, and occurring as that substance does often on the very surface of the earth, it could have scarcely escaped the notice of men who made roads, and watered them to keep down dust.

Waggons.

The Rig Veda makes mention of waggons; so do the great national epics; and the lexicon of Amara Siñha gives distinct names for covered conveyances of several kinds, as also for open carts for the carriage of goods. The *Mrichchhakaṭi*, which, as already stated, dates, according to Wilson, from the second century before the Christian era, and under the lowest computation cannot be brought down below the beginning of that epoch, takes its name from a fictile model of a cart, which had been given to a child as a substitute for a golden one, which it had seen with a playmate, and wished to have, but which could not be provided by his indigent parents. In the play itself, there are descriptions of roads blocked by a great number of carts, of covered litters provided with cushions, having doors behind, and drawn by two bullocks, and carts and litters of different qualities,—all which cannot but be accepted as indications of vehicles of various descriptions having been in common use. I do not remember to have any where read of a one-bullock cart; but in the tenth mandala of the Rig Veda, mention is made of a waggon or car which was drawn by a team of which one was a bull and the other a buffaloe. A sage, named Mudgala, is said to have achieved great success in the battle-field by driving this ill-matched pair. And seeing that mention is made in that work of a team of four bullocks yoked to a plough, it may be very reasonably concluded that occasionally waggons had more than a pair. Three and four bullocks to a cart or waggon is common enough in the present day in the North-Western Provinces. The nature of the country never rendered such large teams as of ten to twenty bullocks, so common in Cape Colony, necessary or desirable in India.

Of the form of the covered waggon we have only one example in the Amarávatí sculptures, and it corresponds pretty closely

* Laidley's Fa Hian, p. 259.
† Ancient Egyptians, i. 337.
‡ Sakuntalá, Act VII.

No. 55.

with the description given in the *Mrichchakatí*, a two-wheeled vehicle drawn by a pair of bullocks, and opening behind to receive the riders, the driver being seated in front in the same way as in the present day. (Woodcut No. 55, copied from Fergusson's "Tree and Serpent Worship," plate LXV.) Indeed, the persistency of custom in this respect appears so great, and the progress of art so cramped, that no appreciable change has been effected within the course of the last sixteen hundred years, and the North Indian waggon of to-day seems to differ in no respect from what was in use in the fourth century of the Christian era.

Whip and goad.

The whip as delineated at Sánchí is a stiff leather thong attached to a short handle, very like the modern *kopá*. It was called *kasá*, and under that name is frequently mentioned in ancient writings. For elephants the *ankus'a*, or a short staff mounted with an iron crook, was the only instrument in use for guiding them, and it remains unchanged to this day. The ankus'a shown in Illustration No. 194, taken from the Sánchí bas-reliefs, differs in no respect from the instrument of that class now in use all over India.

Palankeens, &c.

The palankeen *(s'ivikà)* is frequently named in the great epics and other Sanskrit works; but it has not yet been met with in sculptures, and its ancient form, therefore, remains unknown. In its place we have a sort of a moveable kiosk, or sedan, with four posts bearing a canopy, and carried on men's shoulders on two poles. The body of the vehicle is a square wooden platform mounted on four short legs, and provided with rich cushions and pillows. It is used to this day on ceremonial occasions, and is known under the name of *Chaturíola*. It bears a close resemblance to the Sukhásana noticed in connexion with thrones, (*ante* p. 104), and is in fact a variety of it.

CHAPTER V.

RELIGION OF THE TEMPLE-BUILDERS.—Primitive idea of religion. Buddhism. Hinduism. Sivaism; its origin. Objections to its Aryan origin. Objections considered. Relation of Śiva to Rudra. The origin of the myth of Rudra. Relation of Rudra to the Lingam. Tantric Doctrine of Śáktaism. Vaishnavism; its antiquity; its development. The doctrine of Bhakti; its modifications; its relation to Sufiism; its development by Chaitanya. The cults of Sûrya and Ganeśa.

"THE lowest savages," says Sir John Lubbock, "have no idea of a deity at all. Those slightly more advanced, regard him as an enemy to be dreaded, but who may be resisted with a fair prospect of success; who may be cheated by the cunning, and defied by the strong. Thus the natives of the Nicobar islands endeavour to terrify their deity by scare-crows, and the Negro beats his fetish, if his prayers are not granted. As tribes advance in civilization, their deities advance in dignity; but their power is still limited; one governs the sea, another the land; one reigns over the plains, another among the mountains. The most powerful are vindictive, cruel, and unjust. They require humiliating ceremonies and bloody sacrifices."* There is nothing to show that the Uriyá does now, or ever did, form an exception to this rule. In his most primitive state, as represented by the Patuá,† he has to this day no idea of a deity at all; and it would be no violent presumption to suppose that in early prehistoric times, he was no better than the Patuá of the present day. The first step in advance brought him to face gods, inimical, fierce and cruel, whom he had "to cheat by cunning, or defy by strength," and in this form he is met with in the Sabaras of the present day. The next step brings us to the Khonds who appease their gods with human sacrifices and bloody offerings. It is probable that the Uriyá appeared in all these different forms in different parts of Orissa when the *Vrátyas* or degraded Kshatriyas of Manu first came among them, and gave a new impulse to progress, (*ante* p. 2). Two such markedly dissimilar forms of humanity as the ancient aboriginal Uriyá and the Hindu, could not abide together without causing a ferment. The strong must have told upon the weak, and it is to be presumed that thereupon, as in other parts of India, the history of Aryan civilization repeated itself, driving the more obstinate and resolute, *i. e.*, those who were most attached to independence among the aborigines, from their homes to the shelter of hill sides and forests, and amalgamating, though partially, with the more docile and tractable, by admitting them into the pale of Hinduism as a servile race. The intercourse thus established led, as elsewhere, to extensive miscegenation, and the result was a mixed race, who professed forms of Aryan religion, tinctured more or less with the ancient faith of the country, according to the social status of the different orders of the people. The lowest stratum probably remained, as they continue to this day, nearly unchanged; while the highest bore a close similitude to the ordinary run of the Brahmanical order of Northern India. On the whole, the bulk of the people were Hindus, and professed a Hindu faith; at least such is the only conclusion that can be drawn from the mention of the Vrátya Kshatriyas by Manu.

It was this mixed race and degenerate form of Hinduism that Buddhism first encountered when it made its appearance in Orissa. And as the earliest remains of human art that have yet come under notice in that province are unmistakably Buddhist, it is not necessary for the purposes of this essay to go beyond the earliest date to which they extend.

Buddhism.

Remains of Buddhist monuments have been met with in almost every part of Orissa: Balasore, Jájapur, Asighar, Nálti, and different parts of the Puri district afford them in pretty abundance; but the most important are the caves of Udayagiri, and the carved rock of Dhauli. Both contain Páli inscriptions in the oldest Indian, or the Lat, character,‡ and are unquestionably works of the third and fourth centuries before Christ. Taking this as the starting-point we have a period of over a thousand years to the time of Hiouen Thsang during which

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* British Association Report, 1869, p. 144.

† Journal, Asiatic Society of Bengal. (XXV. p. 205 *et seq.*) Dalton's Descriptive Ethnology of Bengal, p. 157.

‡ A Páli inscription is said to have been met with at Nálti, but I have not yet seen it.

Buddhism prevailed in the country. It is not to be supposed, however, that Buddhism must necessarily date its introduction into the country from the time of these inscriptions. It may fairly be inferred that the first missionaries of that faith must have made their appearance long before the promulgation of the edicts of As'oka. It would be equally wide of the mark to imagine that it ever was universally accepted by the Uriyás, for there is nothing to show that Buddhism did succeed in any part of India, much less in Orissa, entirely to extirpate the pre-existing religion of the people. As a reformation of the current faith, it fought its way, and for a time, as the state religion, held its supremacy; but the Buddhist records themselves admit that it always lived side by side with Hinduism. In the middle of the seventh century, Hiouen Thsang found "the followers of error and of the truth living pell-mell" in the capital, and "many heretics, who frequented the temples of the Devas."* According to the Siyuki (Lib. X. fol. 10), amidst a hundred monasteries and ten thousand monks, "there were fifty temples of the gods"† devoted to Hinduism. This proportion must doubtless have varied considerably at different times, and under particular circumstances; but there is nothing to justify the conclusion that one of the two contending elements was ever wanting in Orissa, since the day of the first introduction of Buddhism into it.

The form of Buddhism which prevailed in the time of Hiouen Thsang was that of the "Great Translation" or the *Mahâyâna*,‡ *i. e.*, the most developed form as settled at the third convocation in the time of As'oka. But the "Little Translation" was not unknown at the time, and the first missionaries who brought the faith to Orissa long before the date of As'oka, must have preached one or more of the earlier forms of the faith. The sculptures extant, however, do not afford any information on the subject, and it would require more space and time than I can spare to discuss it in all its detail in this place.

Hinduism.

The temples of the Devas noticed by Hiouen Thsang were probably mostly Sivaite, for it was during the two centuries preceding his travels in India that the new impulse given to the worship of the Dread Destroyer, Rudra, by the Kesari dynasty, had manifested itself by raising to the honor of S'iva several lofty temples which preceded the completion of the great tower of Bhuvánes'vara. Seeing, however, that some of the Gupta Rájás were at least three centuries before followers of the Vaishnava faith at Eran and Allahabad, it would not be presumptuous to conclude that that form of Hinduism was, likewise, known and practised by some of the Uriyás. Exception might doubtless be taken to the conclusion on the ground of no trace of its existence at the time having yet been met with. But such a line of argument would serve only to defeat itself; for it might be made to apply to Vedic Hinduism of which no tangible relics are extant, and written history, even such as are accessible, will easily set aside the objection in either case.

S'ivaism.

Exception might also be taken to S'ivaism being reckoned as a Hindu form of worship, the opinion among some European orientalists being in favour of its non-Aryan, or Tamulian, origin. The question is of great importance in connexion with the history of the structures which form the subject of essay, and it is necessary therefore to dwell on it at some length.

Its origin.

The *pro* and *contra* of the question may be argued with equal force. On the one hand apparently the most incontrovertible arguments might be culled from the Hindu S'ástras, to prove the non-Aryan origin of S'ivaism, often from works which are avowedly intended to glorify and promote that form of worship. While on the other, equally strong reasons might be adduced to show that it formed a part and parcel of the Bráhmanical orders from a very remote period in the history of man, and was one of the earliest objects of human faith even in the most ancient seats of civilization.

Objections to Aryan origin.

The arguments in favour of the non-Aryan theory may be enumerated under the following eight heads:—

1*st*.—Vedic denunciation of phallic worship.
2*nd*.—Denunciations in the Smritis.
3*rd*.—Numerical inferiority.
4*th*.—Unholy character of the offerings to S'iva.
5*th*.—Prohibition to build temples of S'iva within the limits of towns and villages.
6*th*.—Anti-Vedic character of S'iva's chief worshippers.
7*th*.—The shape of S'iva.
8*th*.—The disreputable character of S'iva.

* Martin's Hiouen Thsang, p. 183.
† Ibid, p. 425.
‡ Ibid, p. 185

The 1st argument is founded on a passage in the Saṅhitá of the Rig Veda. In the 21st hymn of the 7th Mandala, Vasishtha prays Indra to preserve his sacrifice from being defiled by the worshippers of the phallus, who are taken for granted to be inimical to Vedic rites, and classed with Rákshasas, evil spirits, and disorderly beings. The passage runs thus: "Let not the Rákshasas, Indra, do us harm; let not the evil spirits do harm to our progeny; most powerful (Indra), let the sovereign lord (Indra) exert himself in the restraint of disorderly beings, so that the *S'isnadevás* may not disturb our rite."* The word *S'isnadevás* literally means "those who have the phallus *(s'isna)* for their god *(deva)*." Yáska takes it to imply "persons who do not observe Brahmacharya" or continence, *i. e.*, unchaste, *(abrahmacharya ityartha)* in the same way as gluttons are described in the Bible by the phrase "whose god is their belly;" but this explanation is not satisfactory, inasmuch as the unchaste are nowhere reckoned in the Veda to be as low as Rákshasas or evil spirits, nor the contamination caused by contact with them such as to require divine intervention; on the contrary, a simple expiatory offering with butter, or a certain number of repetitions of the gáyatrí, is held sufficient to render the unchaste fit for the priestly office. The word is of rare occurrence, and a very different word is ordinarily used to indicate those who are addicted to carnal enjoyment. It may, therefore, be presumed to imply the aboriginal phallic worshippers, who are, likewise, the Dasyus, Asuras, Rákshasas, and other evil spirits of the Vedic writings.

First objection.

The 2nd refers to denunciations in the Smriti. The passage which has to be quoted in support of this assertion occurs in the Vasishtha Smriti, a work attributed to the same Rishi who denounces the S'isnadevás in the Rig Veda. The work is of a much later date, and is most probably a compilation, such as the Saṅhitá of Manu unquestionably is; but it is nevertheless a work of high repute, and forms one of the principal guides to modern Hindu domestic and religious rites. It has been thus rendered by Professor Max Müller:

Second objection.

"A Bráhman versed in the four Vedas, who does not find Vásudeva, is a donkey of a Bráhman, trembling for the heavy burden of the Veda. Therefore, unless a man be a Vaishṇava, his Bráhmanhood will be lost; by being a Vaishṇava one obtains perfection, there is no doubt. For Náráyaṇa (Vishṇu) the highest Brahma, is the deity of the Bráhmans; Soma, Surya, and the rest are the gods of Kshatriyas and Vais'yas; while Rudra and similar gods ought to be sedulously worshipped by the S'údras. Where the worship of Rudra is enjoined in the Puráṇas and law-books, it has no reference to Bráhmans as Prajápati declared. The worship of Rudra and the Tripuṇḍra (the three horizontal marks across the forehead) are celebrated in the Puráṇas, but only for the castes of Kshatriyas, Vais'yas, and S'údras, and not for others. Therefore, ye excellent Munis, the Tripuṇḍra must not be worn by Bráhmans."† The Bhágavata Puráṇa follows this very closely, and says: "Those who profess the cultus of Bhava (S'iva) and those who follow his doctrines, are heretics and enemies of the sacred S'ástras."‡ Similar passages may be quoted from the other Puráṇas. The strong feeling of attachment which they evince towards the worship of Vishṇu, is of course due to uncompromising sectarian zeal; but the question suggests itself, does the statement that the worship of Rudra as inculcated in the Puráṇas is designed for the S'údras, owe its origin to that cause solely, or to anything more historical?

The 3rd argument is based on the numerical inferiority of the S'ivites. The number of Hindus who have accepted S'iva for their special divinity is limited. The various classes of houseless hermits apart, there are very few persons who have accepted the *vija mantra* of this divinity, and worship him to the exclusion of all other gods. Doubtless all the S'áktas pay him high respect, but only as the husband of Umá, and not as the god elect for their salvation. The Vaishṇavas also look upon him with great veneration, but only as one of the triad, and a person who has attained the highest perfection in meditation, as the greatest of Yogis, and not as the giver of salvation. These remarks may appear to Europeans irreconcilable with the fact that S'ivite temples are infinitely more abundant in every part of India than those of all the other gods put together; but to Hindus who know the number of

Third objection.

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* न शाशद इन्द्र जुजुषुर्नो न विन्दत्र प्रशिक्षणामि ।
न मर्धतो दिषुषस्या नो शिश्नदेवा अपि गुर्ऋतं नः ॥
शिश्ने दोषन्नक्तं जोषमुषसि शिश्नदेवाः । मेमानुचानो एतद्वः ।

Dr. H. H. Wilson, after quoting this passage of Yáska, adds, "but it may have the sense of those who hold the Lin.a for a deity." Rig Veda, IV., p. 6.

† Ancient Sanskrit Literature, p. 55.

चतुर्वेदी च यो विप्रो बाह्मदेयं न विन्दति ।
वेदभारवहाताना च वै बाह्मणाद्भमः ॥
तस्माद्वैष्णवतेजस बाह्मणादि विधीयते ।
वैष्णवजेम संसिद्धि क्रमते नाच संशयः ॥

नारायणं परं ब्रह्म बाह्मणानां हि दैवतं ।
सोमसूर्यादयो देवाः क्षत्रियाणां विशामपि ॥
शूद्राद्दीनान् रुद्रजाया अर्चनीया: प्रयत्नतः ।
यत्र रुद्रार्चनं प्रोक्तं पुराणेषु स्मृतिष्वपि ॥
तद्ब्रह्मणविनयसंबन्धात् प्रजापतिः ।
रुद्रार्चनं त्रिपुण्ड्रञ्च पुराणेषु च गीयते ॥
क्षत्रविट्शूद्रजातीनां नेतरेषां महामुने ।
यस्मात् त्रिपुण्ड्रं विप्राणां न धार्य्यं मुनिसत्तमाः ॥

‡ भवभवरा ये च ये च तामसमूर्तयः ।
पाषण्डिनस्ते भवतु धर्मव्रतपरिप्लवाः ॥

the several classes of *gurus*, or spiritual guides, whose especial duty is to initiate people in the secret mantras of the different gods, they will cause no wonder: there is scarcely one in a hundred gurus whose vocation is to impart the mantra of Śiva; and he is generally the poorest, owing to his having the smallest number of disciples. Even by Europeans "it will be generally observed," says Professor Wilson, "that these temples (of Śiva) are scarcely ever the resort of numerous votaries, and that they are regarded with comparatively little veneration by the Hindus. Benares, indeed, furnishes exceptions, and the temple of Viśveśvara is thronged with a never-ceasing crowd of adorers. There is, however, little solemnity or veneration in the hurried manner in which they throw their flowers or fruits before the image, and there are other temples, the dwellings of other divinities, that rival the abode of Viśveśvara in popular estimation."*

The hermits, who constitute the especial worshippers of Śiva, are all professional mendicants, living in rare instances "collected in opulent and numerous associations, but for the greater part detached, few, and indigent." Their total number constitutes but a small fraction of the Hindu community.†

From a survey of these facts the conclusion at which Professor Wilson arrived was, that "the adoration of Śiva has never assumed, in Upper India, a popular form. He appears in his shrines only in an unattractive and rude emblem, the mystic purpose of which is little understood, or regarded by the uninitiated and vulgar, and which offers nothing to interest the feelings or excite the imagination."‡

Fourth objection.

One most important mark of reverence to a god is the eating of the remnants of offerings made to him. This is called "taking the Mahâprasâda" *mahâprasâda sevana*, and no votary can forego it. But in the case of Śiva, this is forbidden. At all the great temples of Vishṇu, Kâlî, Durgâ, and other gods and goddesses, the most important daily ceremony consists in offering large quantities of various articles of food, and subsequently distributing the same among the faithful; and no image of a god is anywhere kept which has not its daily allowance of some choice food according to the means of its votaries. But Śiva has no such allowance assigned to him. With the exception of the presiding divinity of the great temple at Bhuvaneśvara and of two or three others, no image of Śiva, not even the idol in the celebrated fane of Benares, has anything like a large supply of sweetmeats, and rarely any cooked food§ served to it, and even the most orthodox Śivite thinks it positively sinful to eat of food offered to this divinity. The prohibition occurs in the *Bahvricha Grihya Paris'ishta*, and it runs thus: "Leaves, flowers, fruits, and water, become unfit to be eaten after being offered to Śiva: but they become pure after being brought into contact with an ammonite stone, Śâlagrâma."‖ The Purânas, as also the Smriti digests and the Tantras, have quoted it largely: and it is evident that it must be of very ancient date, otherwise the unanimity of the Hindus of all sects on the subject and the absence of offerings in the temples, would be unaccountable. But what is more to the point, S'âkta and Śaiva Tantras, designed expressly for the glorification of the worship of Śiva, recognise the prohibition, and try to explain it away. Thus, in the Lingârchana Tantra the great goddess Durgâ is represented as very much troubled in mind as to why flowers and fruits offered to Śiva, instead of being sought for and prized as highly sacred by Brahmâ and other gods, should be held positively impure; and Śiva thereupon explains the mystery by saying that as the poison he had swallowed at the churning of the ocean was sticking in his throat, and ever since causing him much pain and suffering, food taken by him through his topmost mouth got tainted by it, and consequently became unfit for consumption by weak mortals. "The wretch who accepts for consumption remnants of such offerings, becomes consumed, and there is no redemption for him." He added, however, that flowers, leaves, &c., placed before him, *i. e.*, before any of his side faces, could not be so tainted, and they are fit to be offered to Vishṇu and carried about on the head.¶ The *Krishṇa-janma-khaṇḍa* of the Brahma-vaivarta Purâna gives quite a different version of the affair.

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* Essays on the Religious Sects of the Hindus, I., p. 188.

† They include the Daṇḍis, the Das'nâmis, the Jogis, the Jangamas, the Paramahaṁsas, the Aghoris, Urddhavâhus, the Âkâs'amukhis, the Nakhis, the Gudaras, the Rukharas, the Sukharas, the Ukharas, the Kaṇṭhâlingis, the Sannyâsis, the Brahmachâris, the Avadhûtas, and the Nâgâs. For detailed descriptions of these, *vide* Wilson's Hindu Sects, Essays, I., p. 188, *et seq.*

‡ Essays on the Religious Sects of the Hindus, I., p. 189.

§ Paramânna is given in small quantities.

‖ यदाद्यं शिवनैवेद्यं पुष्पं फलं जलं।
ब्राह्मणास्थिशिलास्पर्शात् सर्वं याति पवित्रताम्॥
Bahvricha Grihya Paris'ishta.

In the Varâha Purâna this Śloka occurs in a modified form, thus—

फलपुष्पं शिवनिर्माल्यं पत्रं पुष्पं फलं जलं।
ब्राह्मणास्थिशिलास्पर्शात् पावनं सद्गुणं सदा॥

The meaning however is substantially the same.

¶ देवुवाच। दूरतः शव निर्माल्यं ब्रह्मादीनां ह्यशान्तिदं।
तत्कथं परमप्राप्तं निर्माल्यं सम दूषितं॥
ईश्वर उवाच। मध्यमास्यमिदं पशु सर्वदं परमेश्वरि।
शास्त्रं तत्र देवानां सदा कण्ठे व्यवस्थितं॥
कालाग्निरुद्रविषं तत्र पर्वताग्निसमं सदा।
तेजोमयं सदेवानि मुखपद्मे वरानने॥
घोरोदमथने देवि यदजातं हरं समत्।
तत: करतलेऽत्यन्तं पतितं परमेश्वरि॥
शिरोनं तदिदं सत्कं तोयन ब्रह्मणात्मनम्।
मदिदं कण्ठदेशे तु स्थितं हि सर्वदा मम॥
यत: प्रभृति देवेशि मुखं ज्ञालयने सदा।
पत्रं वा यदि वा पुष्पं फलं वा वरवर्णिनि॥

In practice the prohibition is respected in the way it is explained in this extract.

According to it Rádhá is the questioner, and her lover Krishna, the interpreter, and the latter attributes the prohibition to a curse of Durgá. Once on a time Saunaka had been on a visit to Krishna at Goloka, and thence had brought away some choice food which had been presented to him by his host. This he distributed among his friends, and Śiva, obtaining a share, eat it, and was in an ecstasy of delight. When Durgá came to know of it, she upbraided him for not having given her a share. "Since," said she, "you have not given me a portion of the inestimable food of Vishnu, henceforward whoever will eat of food consecrated to thee, Maheśvara, shall be born a dog for one generation in the Bháratavarsha." Repenting afterwards of what she had said, she limited the curse to what was offered on the top of the Lingam, and that too, she added, would become pure on being mixed with the remnants of offerings made to Vishnu.* Ingenious as these explanations doubtless are, they cannot suffice to remove the suspicion, that Śiva was originally a god of the aborigines, and that the Hindus first hated him, then became indifferent, then tolerated him, and lastly, accepted him as a great god; but, particular as they always have been regarding the use of food touched by the aboriginal races, the original repugnance to taste of food offered to the god by low caste people could not be got over, or at least the memory of it lasted so long that an explanation or reconciliation was called for.

Fifth objection.

The prohibition to build temples for Śiva within the boundary of a town or village, can be looked upon only as a counterpart of the law which excludes Pariahs, Chandálas and other low castes from the right of dwelling in a town or village inhabited by the higher orders of the Aryan race; and if so, it must follow that the divinity belonged to the low caste people, or the aboriginal races, and not to the Aryans. Doubtless the prohibition has long since ceased to be effective, and there is not a single town throughout the length and breadth of India, which, being largely inhabited by the Hindus, has, if not several, at least one Śivite temple of importance, but the memory of the prohibition implies that at one time or other such temples were looked upon with disfavour.

Sixth objection.

The principal worshippers of Śiva were either avowed heretics, or men who had lost their character among the people for the impious lives they led. Rávana was a Rákshasa, or cannibal, who rose to power of the highest order by his devotion to Śiva. Bána was an Asura, or demon, who thrived by the blessing of the same divinity. Jarásandha was a great tyrant, who kept thousands of Hindu Rájás in confinement, and led a most infamous life; he was a favourite of several great non-Aryan chiefs whom the Bráhmans took great pains to put down, and he also owned allegiance to Śiva, and to Śiva only. The Nágas, who were of a Tamulian race, and more or less inimical to the Bráhmanical leaders, were adorers of that god; and most of the other aboriginal races likewise did, and still do, follow that divinity. While on the other hand no distinguished Aryan chief ever selected Śiva for his tutelary god. This would scarcely have happened had Śiva originally belonged to the Hindu Pantheon.

Seventh objection.

The next exception taken to Śiva's Aryan-hood is due to the shape in which he is worshipped,—an uncarved or rudely carved block, such as a rude primitive race, like the ancestors of the present Kols and Bhils, might alone accept as the emblem of the godhead. The Aryans, familiar with the ritual of the Vedas in which no images are tolerated, could not themselves design it, much less identify it with so disgusting an object as the Lingam. Certain it is that they have often felt shocked at the idea, but unable to denounce the divinity of Śiva, tried to explain it away. The Vámana Purána attempts it in this wise: When Śiva was influenced by Cupid, he roamed about naked, and in an amatory mood in the Dáruvana forest, where dwelt a number of

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* अन्यं हि परमान्नानि उपचारं मनोहरं।
यो दद्यात् परमान्नानि सकलेपरि यत्नेन।
अवाप्य तत्तु निर्माल्यं भोक्तारं ब्रह्मवर्त्म यत्।
एतत् परमान्नानि निर्माल्यं यत्तु शारदेश।
स भवो जायते देवि निष्कृतिर्नोस्ति तस्य वै।
अवाप्य मम निर्माल्यं यत् तत्र परात्मने।
यदत्तं भक्षते देवि पूर्णं वा पयमुत्तमम्।
सप्तिर्णां भवेन्नाम श्वयोनाम् शिरसा धरा।
प्रथमं विष्णवे दत्वा विष्णुमन्नेन यत्नेन।
निर्माल्यं तस्य देवेशि विष्णोर्याद्य वरात्मने।
देवाद्यरनुमुख्याद्य श्वपचैः किङ्करादयः।
ते सर्वे परमान्नानि वराहाः सुखभुजः।
निर्माल्येषु च देवेशि अधिकारी कथं भवेत्।
इति ब्रह्मवै १२। १४ पटले।

यतो मे दत्तं भवेत्तु विष्णोर्नैवेद्यमुत्तमं भुवा।
अतो मतो मयारोपितं ब्रह्मणेन भवेश्वर।
अद्यप्रभृति ये लोका भैरवं भुञ्जते तव।
ते लोकेषु भारतेषु भविष्यन्त्येव भारते।
इत्युक्ता पार्वती साध्वी भवेद्भ पूरतो विभोः।
दत्तं पपात तत्पश्चे नीलवर्णो बभूव सः।
तदा शिवः शिवां प्राह शृणु देवि शारदम्।
तव्यामभद्र सोपेन विप्रलेन चकार च।
करेण चक्षुषोर्नेत्रं मक्षणं च पुनः पुनः।
बोधयामास विविधैर्नीतिशास्त्रैर्भवेश्वरीं।
परितुष्टा च सा देवी शंकरं वाक्यमब्रवीत्।
कलेरन्तु तव्यामि भवेद्देव शिवे शरे।
शिवशिवे देवि सदा भवेत्तामाग्यवर्द्धनं।
कथं वक्ष्यामि लोकानां परदिनत्व कलेवरं।
अधर्मं तव भवेत्तु अक्षयत्वमुरारयं।
इत्थं पुरं पतु तत्रात् धर्म देवं तथापि च।
शिरोपरि च यदत्तं तदाराधनमीश्वर।
पवित्रं हि भवेत् तत्तु विष्णोर्नैवेद्यसिद्धिदं।
ब्रह्मवैवर्तपुराणे ३० अध्याये।

sages with their families. He asked alms of the sages, but they averted their faces, ashamed to look at his nude figure. He then turned towards their huts, and saw the wives of Bhárgava, Angirasa, Atreya, &c., and they were at once overcome by his charming appearance, and induced to follow him to the neglect of their household duties. The sages, perceiving this, cursed him, so that a member of his body dropped off. Śiva immediately disappeared; but the fall of the member of his body caused a fearful commotion, and the earth shook repeatedly, showing threatening signs of immediate destruction; all creation trembled with fear; and the sages, in trepidation, sought the advice of Brahmá. That great divinity was, however, neither able to expound the cause of the misadventure, nor devise a remedy to prevent the destruction of the earth. He sought, therefore, the abode of Śiva in the company of Vishnu, and besought his aid. The advice he got was to adore the dislocated member; and this was accordingly done, and the earth was saved. Brahmá, thereupon, ordained that all the four orders of mankind should for all time to come worship it. Several Rishis subsequently laid down elaborate rules founded upon this ordinance, and the worship became general. Among the last is named the sage Kundodara who was by birth a Śúdra.* Elsewhere the Puráṇa repeats the story, but with some variations. The Rishis are said to have been the Bálakhilyas, and the instrument of dismemberment their staves and brickbats, instead of a curse, although the latter is undoubtedly the most potent in Bráhmanical estimation. Vishṇu is also excluded from the deputation.

The author of the *Uttara-kánda* of the Padma Puráṇa was, however, not satisfied with the above story, and so he devised another. According to him once on a time the renowned sage Bhrigu repaired to Kailása on a visit to Mahádeva; but he was not allowed admission to the palace by Nandi, the warder, on the plea that his master was then in the company of his wife, and not at leisure to receive him. The sage tarried long at the gate, but to no avail, and at last, losing all patience, cursed the god, saying: "Despicable and deluded is Śankara who fails to recognise me; and inasmuch as he has, stupified by the society of women, insulted me, his form shall be that of the *yoni* and the *lingam*. Overcome by delusion as he recognises not me, a Bráhman, he ceases to be a Bráhman, and shall henceforward be unfit to be worshipped by the twice-born classes. There-

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* तथापि तस्या सदनं ददर्श शवैस्तथा ।
दृष्ट्वा प्रकृतिकामोग्रं तत्रः स पाटवत्तरः ।
ततो दारुवनं घोरं मदमोहितसंज्ञितः ।
विवेश तत्रस्थान् स्व पत्नीको जगर्हितान् ॥
ते ऽपि तत्रस्थ सर्वं दृष्ट्वा मुनिः । मनोभवम् ।
ततस्ताम् प्राह भगवान् भिक्षां मे प्रतिदीयताम् ॥
ततस्ते मोहितमनसः सर्वे एव मुनीश्वराः ।
तदाश्रमाणि पुण्यानि परित्यज्याशु जारद ।
तं प्रविशं सदा दृष्ट्वा भार्गवाद्येषु योषितः ।
प्रहोभमानसाः सर्वा रोमसञ्चा समन्ततः ।
यत्ने अत्यन्तलोभासमस्तत्याज्य सांविधीं ।
एतास्यां सर्वपत्नीनां ततस्ते दुःखिता भृशं ।
ततः सर्वमुनिभिः सर्वा एव शापिताः सर्वेश्वरः ।
सत्र पतन्ति लोकाश्च सदस्किल्बिषिणस्तथा ।
यज्ञानयन्ति मूढत्वात् यानि वा मुनिपोषिताः ।
अनुजग्मुर्यथा सर्वे कैरिणः इव कुञ्जरं ।
ततस्तु तत्पतं दृष्ट्वा भार्गवाद्यैरसौ मुनिः ।
लोकानिमा जुगुप्सन्तं लिङ्गात्मा पतितां भुवि ।
ततः पपात देवस्य लिङ्गं प्रथ्वीं विदारयत् ।
चचालोर्वं अकाशाच्च विद्युतो भीकरोदिताः ।
ततः स पतितो लिङ्गो विभिद्य पदमालतलम् ।
रसातलं विवेशाशु ब्रह्माण्डं चोर्ध्वतोऽभिनत् ।
ततश्चचाल प्रथिवी विरवा सरितो गताः ।
पातालभुवनाः सर्वे अद्रयश्चाऽऽशु चिक्षिपः ।
सदग्धुमान्त भुवनान् दृष्ट्वा भूतादिकान् पितामहः ।
जगाम भार्यया सार्धं क्षीरोदं नाम सागरं ।
तत्र दृष्ट्वा श्रवीकेशं प्रणिपत्य च भक्तितः ।
उवाच देव भगवन् किमर्थं चलिता स्थितिः ।
कथं चाद्य धरित्रीयं भाग्यो लिङ्गो मदर्थेभिः ।
पातितश्चास्य भारार्तो सङ्कटान्न चलुस्थिरा ।
तत्तदादुत्तमर्थं पृच्छा देवः पितामहः ।
तत्र श्रुत्वा हरिर्देवः प्रत्याह पुनः पुनः ।
ततः पितामहो देवः केशवस्य अनन्तसः ।
आजगाम तत्रदेवं यत्र लिङ्गं भयङ्करं ततः ।
मनोजस्य हरिर्लिङ्गं दृष्ट्वाशु खमेश्वरः ।
पातालं प्रविवेशाग्रं लिप्तपात्तरितो विभुः ।
तच्छा सदृविमानेन ऊर्ध्वमाकाश्य सर्वतः ।
मैनाकमस्तकगतं तच्छा लिङ्गितः पुनरागतः ।
विष्णुर्ब्रह्मणः पातालं मस्तकोपरागतः ॥
तत्रापि लिङ्गिच्छाग्नो जेमलं न सशामुभे ।
विष्णु पितामहौ [illegible] क्षाणाश्च च ।
ममोऽस्तु ते सुरश्रेष्ठ ममो[illegible] ।
जीमसवाक्यम कथे सर्वे ब्रह्मण्य शङ्कर ॥
सर्वेश्वर हरेशाम सुरनाथ हषीकेश ।
दयधमस्यरक्षार्थं कालस्य ममोऽस्तु ते ॥
ममादित्रस्य अजस्रं सर्व धरमेश्वर ।
भगवन्तश्च भगवान सर्वस्यं ममोऽस्तु ते ॥
पुनस्तव उवाच । एवं संस्तूयमानस्तु तस्मिन् दारुवने हरः ।
सुरपो सांविदं ज्ञात्वमथ तदमाभरः ।
हर उवाच । किमर्थं देवताभिः परिभूतकलेवर ।
यां मुनीनां भगवासुरुषो कामनाभिविषर्षं ।
देवाचुचुः । त्वयाऽधासित लिङ्गं यदेतद् भुवि शङ्कर ।
एतत् प्रस्थाप्तां भुवनतो देव नहाघर्षं ।
हर उवाच । एवमेवमि विदेशा मुनिभिः सुरोत्तमैः ।
तदेतत् प्रतिस्रोतो मान्यमेनं कथञ्चन ।
तत उवाच भगवान्मेमसिति केशवः ।
सखा अयत्र अधार्थं लिङ्गं कनकपिङ्गलं ।
ततश्चकार सर्वात्मानुमेयं हरवर्धनं ।
ब्राह्मणि ये मन्त्रवित्तं सामोक्तिचेदिनामि च ।
चारं ब्रं परिवाममन्त्रं शाश्वतं मुनं ।
सतीरं क्षेत्रमुदनं चतुर्थं कपालिनं ।
ब्रं चाणीनं मुखं शाक्तिनामुखं विषं तुला ।
सखं शिखा सभाषं वेदानाम इति पुनः ।
सधाधारपक्षकाणोद्धारकासमपोषन ।
सखं शिखं तुमुद्धाश्च तपसः सागरेश्वरः ।
कालस्यो भवनाथोदारकालसमपोषनः ।
सखं शिखा यको देवो नाथा जगेश्वरा मुनं ।
सर्वात्मतो च भवदत्तस्य शिवस्य गोत्रेशम् ।
कुन्दोदर इति ख्यातो जात्या शूद्रो महाव्रतः ।
एवं च भगवान् ब्रह्मा एजनाश्च शिवस्य च ।
ततो तु भार्गवाद्यास्ते समेत्य भवमेव हरं ।
एवं ब्रह्मादि सर्वाणि यथा चक्रुस्तथैव हि सदा ।
लिङ्गं विश्ववसे सृष्टं प्रतिष्ठाप्य यथावत् च ।
इति वामनपुराणे ६ अध्यायः ।

fore shall no water or rice or other offerings be made to him. Rice, water, leaves, flowers and fruits offered to Śiva, and remnants of offerings to him, shall doubtless be unfit to be received (by mankind)." Having thus cursed Śankara, the adorer of mankind, the mighty sage addressed Nandi, the fierce trident-holder of the Gana race: "Those who in this world become worshippers of Rudra, and bear on their persons ashes, bones, or emblems of the lingam, are heretic impostors excluded from the dispensation of the Vedas."*

Eighth objection.

The Puráṇas, both Śákta and Vaishṇavite, dilate largely on the disreputable character of Śiva. His favourite haunts are burning grounds and deserted places. He goes about naked, or dressed in a tiger skin, with snakes for garlands and ashes for cosmetics. His matted hair bespeaks a barbarian. His vehicle is a bull, and his attendants, ghosts and goblins. By temper, most irascible, he is unsociable on account of being constantly stupified with Indian hemp and datura seeds. Hence the Devas often evinced great repugnance to associate with him, and, on one occasion, formally excluded him from the royal feast of Daksha. This can be only accounted for by supposing that the god was a stranger to the great body of the Aryan Devas, and not fitted by his character to enter into their brotherhood.

Reply to the first objection.

The replies usually given to these objections, are, in Hindu estimation, entirely satisfactory, and even to Europeans will appear not without considerable weight, at least in some instances. The first argument founded on Vedic denunciation, having been explained away by the oldest commentator, Yáska, cannot fairly be now revived, particularly as some of the names of Śiva, such as Rudra, Mahádeva, Bhava, &c., are mentioned in the Vedas as those of one of the great gods.

Reply to the second objection.

The second argument may be met by opposing the ordinance of Manu against that of Vasishṭha. Manu says, "Sambhu (Śiva) is the god of the Bráhmans; Mádhava, (Vishṇu) of the Kshatríyas; Brahmá of the Vaisyas, and Ganeśa of the Śúdras;"† and inasmuch as of all Smritis, the Saṅhitá of Manu is the most authoritative, it should override the work of Vasishṭha. It is true that this verse is said to occur in Vrihad Manu, and not in the current compilation, but its authenticity has not been questioned by the Hindus. The Puráṇic denunciations on the subject are obviously founded on sectarian jealousy, and the Bhágavata may be opposed to the Śiva, Linga, and other Śivite Puráṇas.

Reply to the third objection.

The argument founded on the numerical inferiority of the Śaivas, is of little moment, inasmuch as it cannot necessarily lead to the conclusion that Śivaism is recent, and only recently gaining ground. On the one hand there are ample evidences in the Hindu Śástras to show that it prevailed several centuries before the Christian era; and on the other equally undoubted proofs may be adduced to show that Chaitanya and his followers have, in later times, converted a great number of the worshippers of Śiva to adopt the Vaishṇava creed. In a country like India, where so many diverse forms of creeds and sects prevail, it is but natural to suppose that the relative proportions of the different classes of sectaries must constantly vary; but that cannot be an index to the origin of any particular form of worship. The number of Hindus in Káshmír is now very small, but that will not justify the supposition that Hinduism was not at one time the religion of its inhabitants.

Reply to the fourth objection.

The reply to the argument founded on the aversion on the part of the Hindus to taste of the offerings made to Śiva, may be met with in the anxiety, so strongly evinced in all the later Hindu Śástras, to raise the status of the Bráhmans above even that of the greatest of gods. A Bráhman's curse is infallible, and Brahmá, Vishṇu, Indra, and others, bow to it with the profoundest veneration. Vishṇu once submitted to a kick from a Bráhman, and as an emblem of his veneration for his assailant is described to have ever since borne the mark

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* रिटीय उवाच। येऽत्रि मोघं द्विजश्रेष्ठ रुद्रलिङ्गपुरस्कृताः।
कपालास्थिधरं घोरं भस्मगं कृष्णवाससं॥
मोलिभिश्चसमायुक्तं कथं स्यात् सुमहात्मना।
पञ्चब्रह्मसमुत्पन्नं रुद्रमेवाभिपूजितं॥
कथं विरूपिणं घोरं भस्मगं द्विजसत्तम।
विरूपाक्षोऽक्षरः सो न आशासि मङ्करः।
नारीपङ्क्तिसमायुक्तो रक्षाभाजनसंयुतः॥
सोमिलिङ्गधरं वै कथं सङ्गं विधास्यति।
वाङ्मात्रं सो न जानाति तमसा चाप्युपासतः॥
अवरुद्धगतावेतो न पश्यामो द्विजन्मनाम्।
तस्मात् अस्मद्गृहे नित्यं दृश्यं वर्जितया॥

† विप्राणां वेदतत्त्वज्ञो राज्ञां दण्डधरस्तथा।
वैश्यानां तु धर्मज्ञो शूद्राणां अपि माधवः।

of it on his chest; and if, nevertheless, he is a Hindu divinity of high rank, S'iva may well preserve his position in the Indo-Aryan pantheon even after a Bráhman's imprecation on the character of offerings made to him.

Reply to the fifth objection.

This objection is by no means a weighty one. The S'ivites may well say that æsthetic considerations may have had much more to do with it than religion; certain it is that in no part of India are S'ivite temples excluded from the precincts of towns and villages. In Benares scores, if not hundreds, of such fanes stud every part of the town. At Bhuvanes'vara, the palace of Lalatendra Kes'arí stood in close proximity to the Great Tower. The most remarkable fane in the heart of Ujjayiní, in the time of Vikramáditya, was the temple of Mahákála, a form of S'iva; and Kálidása calls special attention of the Cloud Messenger to visit it in his way to Kailás'a. Indeed, it is difficult to find a Hindu city which has not more than one S'ivite temple within its boundary.

Reply to the sixth objection.

The reply usually given to the sixth objection is, that S'iva is described in all the S'ástras as a god most inordinately attached to his votaries; that, however sinful a man may be, he can always secure the grace of that divinity by his devotion; and that the amount of devotion necessary to secure his grace, is much less than what is required for the mercy of the other gods. To indicate this peculiar character of S'iva, he is named *Á's'utosha* or "the easily gratified;" and many are the stories told of the facility with which people obtained his favour by the performance of acts which can hardly be described as devotional. One of them is worthy of note. A hunter of a low caste once happened to be benighted in a forest, and, failing to find his way home, mounted a bel tree to pass the night there. He had no food during the day, and his couch for the night was a thorny one, away from home and family, and tears were the only resource by which he could relieve himself of his painful feelings, and he shed them in abundance. One of them dropping on a ripe bel leaf hastened its fall, and brought it down on the head of an image of S'iva which happened to stand near the root of the tree. This so gratified S'iva, that he made himself manifest to the hunter, and showered blessings on him for his involuntary devotion.* Such a divinity, say the S'ivites, cannot but be easily secured by people not usually particular in the observance of the mandates of religion. To the faithful this is a complete vindication; but it may be added that the anti-Vedic people described in the S'ástras are generally those who were opposed to Vishnu and his followers, and the stories, therefore, may be accepted to represent in allegory the antagonism of the two rival sects of S'ivites and Vaishnavites, both Hindus, and not the rivalry of the aborigines and the Aryans.

Reply to the seventh objection.

The seventh objection refers to the shape of the divinity. This, however, involves the question of phallic worship in ancient times. All the ancient nations of the earth regarded with awe the mystery of generation, and founded on it various myths and forms of religion, some looking upon it as the source of all evil; others as the fountain of existence and blessing. The finest and most perfect allegory extant of the first class, is the Mosaic account of the fall of man. To the philosophic enquirer, this account means nothing more or less than that sin entered this world through the carnal desires of our first parents; but it is so complete in all its parts, and so beautifully developed, that even the most fastidious critic fails to detect the smallest trace of anything offensive or indelicate in it. The tree, the apple, the serpent† are all well-known and generally-acknowledged phallic emblems among the followers of sexual forms of religion; but they have been so artistically put together in the account in question, that they do not at first sight convey any improper idea. The Zoroastrian Aryans adopted the doctrine, and a counterpart of the Jewish account of the fall is given in the Bandahesh, but in a form that has nothing of the charm of the Mosaic record. We are there told that "Meschia and Meschiané, the first man and woman, were seduced by Ahriman under the form of a serpent, and they then committed in thought, word, and action the carnal sin, and thus tainted with original sin all their descendants."‡ On the other hand the Semites and the Turanians looked upon it with feelings of veneration, and gave great prominence to sexual ideas. The Semites indulged in the idea very largely, and Egypt was its stronghold for a long period. All the Egyptian gods had their feminine counterparts, and the emblems of their faith were mostly of a sexual character. "There is reason to believe," says Inman, "that the Vedic, Zoroastrian, Buddhist, and the Christian, were pure in their conception of the Almighty and of man's duty in the world. Some faiths seem to have been founded, we may say, upon the complete abnegation of all bodily propensities; and amongst the Buddhist, Essenes, Christians, and others, the absolute celibacy of both sexes was regarded as the highest act and fruit of 'a

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* The night when this happened was the 14th of the wane in the month of Phálguna, and it has ever since been held sacred, and no good Hindu will allow it to pass without fasting and offerings to S'iva. The Government offices in Bengal are closed on this day, to enable the people to observe this fast.

† It is a popular belief in Bengal that a woman dreaming of a serpent at night is soon after blessed with a child.

‡ Lajard, *la Culte de Mithra*. *Apud* Journal, Anthropological Society, No. II., October 1870, p. 202.

saving faith.'"* This was, however, but temporary, for at one time or another the sexual theory got a footing in almost all ancient forms of religion, and it is difficult to notice a cult of former times in which traces of it may not be noticed. The early Aryans were free from it, and in the Rig Veda Saṁhitá, the gods are described mostly without reference to their wives; but this was only for a time, for in the age of the Bráhmaṇs, the domestic relations and ties of the Devas were fully developed, and the Hellenes carried the remembrance of them to people Olympus with a goodly host of male and female divinities. The cult of Priapus was the issue of this sexual anthropomorphism among the gods. Even that purest form of revealed religion, Christianity, was not able, in the early part of its history, to prevent the Gnostics and others, to import into it a variety of phallic symbols and observances, and there are not persons wanting who look even upon the cross and spires of churches as phallic emblems. Among the Indo-Aryans, the dogma of the oviparous genesis of the universe necessitated a feminine agency, and it opened the way to the cult of the Lingam and Yoni. And even as in this cult "the phallus has been regarded as an emblem of the Creator, so the bull, the ram, the serpent, the torch, fire, the thyrsus, the sceptre, the caduceus, the knobbed stick, the crosier, the letter T, the cross, tall trees, upright stones, or stumps, spires, towers, minarets, poles, spears, arrows, swords, bows, clubs, and a vast variety of other emblems have been employed as symbolic of the phallus. Again, as this organ represented the Creator and the sun, all were typified under such characters, as Bacchus, Dionysius, Hercules, Hermes, Mahádeva, Śiva, Osiris, Jupiter, Molech, Baal, Ashur, and innumerable others."† Most of the emblems here noticed are associated with Śiva. The bull, the type of fecundity, is his vehicle, the three-pronged staff is his arm, and the serpent his ornament. Universally his image is the upright stone, dressed or undressed, and from the Island of Java to the furthest limit of Scandinavia, there is not a country where these uprights do not testify to the once prevalent currency of Śiva's worship in some form or other over a large tract of the earth. But there is nothing in all this necessarily to lead to the conclusion that Śivaism was non-Aryan, borrowed from the aborigines of India, and not self-evolved as the legitimate sequence of the oviparous theory of genesis, or of some other diseased forms of philosophical dogmatism.

Reply to the eighth objection.

Little need be said in reply to the last objection. It would not be logical to argue that the character of a god must necessarily be dependent on the social condition of his worshippers, and that his attributes are inevitably the reflex of those of the latter. Such a line of argument, if carried to its legitimate conclusion, would lead to such absurdities that few will care to accept it. Śiva's character is doubtless not a refined one. But there is nothing in it to make him inevitably the creation of an aboriginal myth. The poetical requirements of a good myth may be supplied, and is more likely to be better supplied by a cultivated Aryan mind than by a barbarian, and there is nothing to show that the Aryan civilization was such as could not tolerate such a god. None will assign to the Hindu a higher intellectual status than what was occupied by those who followed the cult of Priapus, and, therefore, there is nothing *à priori* to make the conception of Śiva impossible in the case of the Aryan people of this country.

Relation of Śiva to Rudra.

It may be argued further that Śiva (by which term I mean the divinity of the Linga form of worship, for the term itself means "blessing" or "the blessed,") is in the Hindu Śástras identified with the Rudra of the Vedas, and if that be admitted, the origin of the Lingam may be indirectly assigned to the oldest source of Aryan Hinduism. This is a most important topic in connexion with the history of Śivaism, and it will, perhaps, not be inopportune to enquire here, how far the identification is sustainable.

The myth of Rudra.

The Vedic conception of Rudra is that of a fierce divinity, typifying all that is terrible. All the other leading gods are personifications of the elements, of natural objects, and of physical phenomena. Indra rules the clouds and the thunder-bolt. Váyu is the regent of the wind, and Varuṇa exercises dominion over the sea. Sávitá is the presiding divinity of the sun, and Soma of the moon. Rudra, however, has no such firm substratum to rest upon. He has no control over the elements, and all physical phenomena are independent of him. In him we behold, not the spiritual essence of a concrete object, but the ideal embodiment of all that is frightful and terrible. He has no command over the air; but he lives in whirlwinds and cyclones, and is the father of the Maruts. He is not the master of the thunder-bolt; but the roar of that dread weapon of Indra is a manifestation of his wrath. The mountains owe him no allegiance; but his abode is the snow-capped peak shooting far above the highest clouds, and threatening instant death to all living beings. He is tawny-coloured and of fierce aspect; strong and impetuous. His hair is matted, and his person is draped with a tiger-skin, girdled with fierce and hissing serpents. Fiery and vigorous, there is

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* Inman's Ancient Faiths embodied in Ancient Names, II., p. 473.

† Inman, *Opus cit.*, II., 476.

nothing more powerful than he. Malevolent by nature, he is "like a terrible wild beast." His weapons are sharp, and his bolts are piercing. "He is swift, and fleet, and speedy." "He dwells in billows and in roaring waters, in rivers and islands," in pathways and roads, in hollows and sides of mountains, in water-courses and lakes and rivers, "in barren land and inaccessible places." Nothing in creation is a more certain destroyer. "He kills in front, and from afar," the dire "slayer and vexer, and afflicter." In him robbers find their chosen lord, and huntsmen with ravenous dogs their patron.* With ghosts and imps, and goblins for boon companions, and armed with a thousand shafts, he roams the earth to the dire consternation of all. In short, he is all that is fierce and terrible, all that is frightful and appalling, all that is awe-inspiring and heart-quaking; or, in other words, the personification of the terrible in nature,—a unification of the presiding divinities, or spiritual essences, of various objects which excited the dread of a simple people, and which at an earlier period were looked upon as so many different divinities.

The birth of this divinity is thus described in *Satapatha Bráhmaṇa* of the Yajur Veda: "This foundation existed. It became the earth *(bhúmi)*. He extended it *(aprathaya)*. It became the broad one *(prithivi)*. On this foundation beings, and lords of beings, consecrated themselves for the year *(samvatsaram)*. The lord of beings was a householder, and Ushas was his wife. Now these 'beings' were the seasons. That 'lord of beings' was the year. That wife Ushas was Aushasi (the daughter of the dawn). Then both those beings, and the lord of beings, the year, impregnated Ushas, and a boy *(Kumára)* was born in a year. The boy wept. Prajápati said to him, "Boy, why dost thou weep, since thou hast been born after toil and austerity?" The boy said, "My sin indeed has not been taken away, and a name has not been given to me: give me a name." Wherefore when a son is born (to any man) let a name be given to him, that takes away his sin; and (let) also a second and third (name be given) to him in succession that takes away his sin. Prajápati said to him, "Thou art Rudra." Inasmuch as he gave him that name, Agni became his form, for Agni is Rudra. He was Rudra, because we wept (*arodit* from *rud* to weep). The boy said, "I am greater than one who does not exist: give me a name." Prajápati replied, "Thou art Sarva" (all). Inasmuch as he gave him that name, the waters became his form, for the waters are Sarva, because all this is produced from the waters. The boy said, "I am greater than one who does not exist: give me a name." Prajápati replied, "Thou art Pas'upati" (lord of animated beings). Inasmuch as he gave him that name, the plants became his form, for the plants are Pas'upati. Hence, when beasts obtain plants, they become lords (or strong?). The boy said, "I am greater than one who does not exist: give me a name." Prajápati said to him, "Thou art Ugra" (the fierce one). Inasmuch as he gave him that name, Váyu (the wind) became his form. Váyu is Ugra (or fierce). Wherefore when it blows strongly, men say, "Ugra blows." The boy said, "I am greater than one who does not exist: give me a name." Prajápati said to him, "Thou art As'ani" (thunderbolt). Inasmuch as he gave him that name, Vidyut (lightning) became his form. Lightning is As'ani. Hence they say that As'ani has struck a man whom lightning strikes. The boy said, "I am greater than one who does not exist: give me a name." Prajápati said to him, "Thou art Bhava" (creation). Inasmuch as he gave him that name, Parjanya (the god of rain) became his form, for Parjanya is Bhava; because all this (universe) arises from Parjanya. The boy said, "I am greater than one who does not exist: give me a name." Prajápati replied, "Thou art Mahádeva" (the *Great god*). Inasmuch as he gave him that name, Chandramas (the moon) became his form. Prajápati is the moon, Prajápati is the great god. The boy said, "I am greater than one who does not exist: give me a name." Prajápati replied, "Thou art Is'ána" (the ruler). Inasmuch as he gave that name, Áditya (the sun) became his form. For the sun is Is'ána, because he rules *(ishte)* over this universe. The boy said, "I am so much; do not give me any further names." These are the eight, Kumára (the boy) is the ninth. This is the threefoldness *(triviritta)* of Agni. Since there are, as it were, eight forms of Agni, the Gáyatrí metre has eight syllables. Therefore, they say, Agni pertains to the Gáyatrí. This boy (Kumára) entered into the forms. Men do not see Agni as a boy, it is these forms of his that they see, for he entered into these forms."†

Rudra as a destroyer.

In this passage Rudra is identified primarily with Agni, and secondly with all the principal objects of nature; his principal names are also recounted. The story is repeated in the Márkandeya Puráṇa, where the name As'ani is replaced by Bhíma, and a slightly different version of it is to be found in the Sánkháyana Bráhmaṇa.‡ The character of Rudra as a destroyer is, however, not brought out in any of these stories, and for it I must quote another passage from the Satapátha Bráhmaṇa in which he is painted in that light, though it does not go to

* Most of the epithets above given, have been taken from Dr. Muir's translations of extracts from the Vedas bearing on Rudra. Sanskrit Texts, IV., p. 274, *et seq.*

† Muir's Sanskrit Texts, IV., p. 284. In one of the Puráṇas a version of this story occurs, in connexion with the birth of Kártikeya, the son of Śiva.

‡ Muir, *Opus cit.* p. 288.

the extent of assigning to him the rôle of the destroyer of the universe at stated times. It runs thus: "From Prajápati, when he had become divided, the deities sprang forth. Only one god, Manyu, did not leave him, but continued extended within him. He (Prajápati) wept. The tears which fell from him remained in that Manyu. He became a Rudra with a hundred heads, a hundred eyes, and a hundred quivers. Then the other drops which fell from him in unnumbered thousands entered into these worlds. They were called Rudras, because they sprang from him when he had wept. This Rudra with a thousand heads, eyes, and quivers, stood with his bow strung, holding arrows, causing terror, and demanding food. The gods were afraid of him. They said to Prajápati, we are afraid of this being, lest he destroy us. They collected for him this food, the Satarudríya, and with it they appeased him. From the fact that they appeased the hundred-headed Rudra, it is wherewith the hundred-headed Rudra is to be appeased."*

The word Manyu means wrath, and the divinity is, therefore, the personification of wrath. Wrath is essentially one of the frightful aspects of nature, and the association, therefore, is most appropriate. For a perfect myth, it was necessary that all the elements calculated to excite the feeling of the terrible should be put together, and this has been accomplished in the conception of Rudra. The transition from fierceness and wrath to the type of the great destroyer which Síva assumes as the third member of the Hindu triad of the creator, the preserver, and destroyer, was easy, and we find it so completed in the Puranas.

With this development of Rudra as the destroyer, a new idea was associated with him, that of the male principle in nature, or the source of creation, which the Lingam symbolizes. The two ideas are distinct, and in many respects highly discordant; the one typifies attraction, the other repulsion; the one invokes love and affection, the other hatred; the one is founded on the desire of creation, the other of destruction; and their concentration in the same individual is irreconcilable with all principles of poetical logic which governs the formation of myths; and it is difficult to conceive how it was brought about. The extracts quoted above show that the Puránas do not attempt to fuse the two ideas into one, but simply assign to Rudra, the destroyer, a disgusting symbol as the result of an accident. They say nothing about the idea of the creative principle being associated with it. The Tantras are not so reticent; they not only acknowledge the esoteric meaning of the symbol, but insist upon it for the glorification of the divinity. They have not, however, as far as I am aware of, anywhere attempted to reconcile the conflict between the two ideas. The Tantras are much more recent than the Vedas and the Bráhmanas, and this fact at once shows that the new rôle of Rudra was an after-thought, adopted at a time when his original character had lost its vividness by age, and had become susceptible of modification, or amplification, without causing any shock to the feelings of the people. When this was first attempted, it is impossible now to determine. The influence of the phallic idea on the religious systems of the Semitic and the Turanian races was predominant from a very early age. In the cults of the ancient Egyptians, Assyrians and Babylonians, it was all-pervading, and it seems to have passed from some one of them to Europe, and found a footing among the early Aryan races of that continent. The myth of Rudra got currency among them some little time after, and its trace still exists in the names of various places, such as Rhoden, Rhodenacher, Rodenburg, Rodenthin, Rottenburg, Rottenfel, Rhode, Rolte, and Rathburg, in Germany; Rutland, Ruthwel, and Ruthin, in England; Rot, Rotholet, and Rotnoe, in Norway. The colossus of Rhodes was probably no other than a gigantic figure of that Rudra.† As in India, so in Scandinavia, Rudra is the chief of storms; but here he drives a swift-moving car through mid-air, while in Europe he rides "a furious horse flying across the sky, with a grand cortege behind him." In an old catalogue of Pagan antiquities, he occurs in the form of a Lingam, and is described as a "Rot," and some Pagan families, before the introduction of Christianity in Norway, are said to have "worshipped the Lingam of a horse preserved in a glass case," (ante p. 66). Here the union of Rudra with Priapus is intimate, and other instances could be easily multiplied, were the subject not so repulsive, to show that it was so united from long before the commencement of the Christian era. That the Vedas originally abhorred the phallic idea is evident, and that it was engrafted on the Vedic cult in later times is also undeniable; but there is wanting that mass of irrefragable evidence which can prove unquestionably that the worship of the Lingam was taken from the aborigines of India. The Semites of the West and the Turanians of the North cherished the dogma very extensively, and much may be said in favour of the loan having proceeded from them, and not from the original inhabitants of India. It may be even questioned whether or not it was evolved by the dreamy mystic sages of India in the course of their own cogitations. The assimilation of sensuous, worldly ideas with the divine has been the failing of mankind in most of its conceptions concerning the Godhead, and nothing is easier to conceive than a sexual origin of creation without any prompting save that of the individual mind, and that at a time of primitive, unsophisticated innocence, when the world was viewed from a very different stand-point to ours. The human mind, being essentially the

Rudra identified with the Lingam.

* Muir's Original Sanskrit Texts, IV., p. 291.

† *Vide passim* Professor Holmboe's Essay, Journal, As. Soc., XXXVI., p. 182.

same everywhere, must lead, when set to any particular train of ideas, to very much the same result: ethnic and local causes may tinge it with race or local peculiarities, but its general character cannot but be alike. But whether borrowed or self-evolved, the worship of the Lingam had been incorporated with Hinduism long before the time when the Sivite temples of Orissa were raised, and there is no reason, therefore, to suppose any aboriginal influence in their erection.

Śáktaism.

It has been already said that in the earliest period of the Vedas, the gods were conceived, doubtless on anthropomorphic ideas, with their respective consorts; but this was done without assigning to the ladies any divine rank corresponding with that of their lords. Agni, Váyu, Indra and Súrya came into being, and obtained their respective dominions, but their wives did not share with them their glory. The "three and thirty gods" of the earliest pantheon were all males, and they claimed the allegiance of the Aryans to themselves, and themselves only. Indráṇí, Lakshmí, Sarasvatí and others are named in the Rig Veda Saṅhitá, but not as objects of worship for the faithful. According to Dr. Muir, "excepting Prithiví, Aditi, and Ushas, most of the other goddesses mentioned in the Rig Veda are of very little importance. Agnáyí, Varuṇáṇí, As'viní, and Rodasí, the wives of Agni, Varuṇa, the As'vins, and Rudra respectively (Nirukta, IX. 33 f; XI. 50; XII. 46), are only alluded to in a few passages, R. V. I. 22, 12; II. 32, 8; V. 46, 8; VI. 50, 5; VI. 66, 6; VII. 34, 22. No distinct functions are assigned to them, and they do not occupy positions at all corresponding to the rank of their husbands, with whom in fact they are never associated. The insignificance of these goddesses forms a striking contrast to the prominent place assumed by the spouses of Siva and Vishṇu, especially the former, in the later mythology."* In course of time, however, sensuous and mundane ideas prevailed, the necessity of providing the gods with becoming wives was gradually felt, and the heaven was peopled with a numerous host of goddesses, some of whom came to the front, and claimed the adoration of mankind like their lords. Umá was the foremost among these. Poetically or mythologically she was the embodiment of the beautiful in nature. Even as Rudra was the impersonation of the terrible aspect of the snow-capped peak, of the desert wild, of frantic wrath, of devastating storms, of all violent commotions, so was she the embodiment of all that was charming and lovely and beautiful in mountain scenery. To the Aryans of India, the Himálaya presented the most terrible aspect of nature, and Rudra, therefore, was its most appropriate lord, while the beauty of that king of mountains, for it is not without beauty of a highly ennobling character, yielded a fitting maiden and becoming bride for such a lord.

Umá, the mother of the universe.

It is not, however, as the mountain-born goddess, the exemplary wife, the sati *par excellence*, most ardent in her devotion to a terrific husband, that I wish to notice Umá in this place. Her name carries us back to a remote period in the history of man when it was synonymous with maternity, and was used to indicate the mother of the universe. Ummáh, am, amone, are terms of great antiquity. 'Am Astoreth' or 'Astoreth is her mother' is a name of a Carthaginian woman who is commemorated in Davis' Carthaginian Inscriptions (No. VIII.) as offering a vow to Tanith, or Anaita. A similar name is found on the Sidonian inscription as that of the mother of Asman Azar, the king of Sidon."† It occurs in the most ancient Hebrew writings, and is equally old in Sanskrit, and, curiously enough, it has everywhere been used in some form or other to indicate the being who first conceived the universe within her, and who is variously designated the "celestial mother," "the mother of the universe," "the mother of the gods," "the spouse of God," "the queen of heaven" and so forth. If Umá herself does not find a place in the Rig Veda Saṅhitá in this character, her type is not wanting in it. Although the theory of creation through the fiat of the Deity is what obtains most favour with the Rishis, still the idea of a feminine counterpart was not altogether foreign to them. The earliest germ of this idea occurs in a hymn in the last book of that work. There it is said, "that the divine spirit breathed without affiation, single with *(Svadhá)* her who is sustained within him; other than him nothing existed. First desire was formed in his mind, and that became the original productive seed, (which) since (has been). Darkness there was; (for) this universe was enveloped with darkness, and was undistinguishable (like fluids mixed in) waters: but that mass, which was covered by the husk, was (at length) produced by the power of contemplation. First desire was formed in his mind: and that became the original productive seed; which the wise, recognising by the intellect in their hearts distinguish, in non-entity, as the bond of entity."‡ Purely metaphorical or allegorical as the idea here conveyed is, it soon assumed by literal interpretation a more substantive form; thus in the Sáma Veda: "He felt not delight, being alone. He wished another, and instantly became such. He caused his own self to fall in twain, and thus became husband and wife. He approached her, and thus were human beings produced."§ The later

* Muir's Original Sanskrit Texts, V. 345.

† Inman's Ancient Faiths, II., 254.

‡ Colebrooke, Asiatic Researches, VIII., p. 393. See in passing Max Müller's observations on this remarkable hymn in his "Ancient Sanskrit Literature," p. 559, and Goldstücker's comments thereon in his Páṇini, p. 146.

§ Ibid. VIII., p. 420.

Vedas, namely, the Bráhmanas and the Upanishads, worked out this figurative language of the Saṅhitás, and developed various myths to establish the rank of this primary mother of creation, and S'vadhá gradually passed into Umá, Lakshmí, and Sarasvatí as consorts of the principal gods who took a share in the act of creation. Elsewhere we recognise her in Isis, Juno, and Venus; and "the mother of God" of the Mariolaters, is no other than she. The eight divine mothers (Ashṭamátrikás) of the Tantras are invariably represented, each with a child on her lap, and are the exact counterparts of the "Virgin and Child" of European art. Umá, the wife of S'iva, appears under various forms, as a virgin or a mother, as fair or dark, as lovely or fierce, according to the exigencies of the myths in which she acts the part of heroine. One of her manifestations was Káli, a nude female of a black complexion, and for her counterparts we have Diana of the Ephesians, Isis, Hecate, Juno, Metes, Ceres, Cybele, and Venus Melainis, all of whom were represented black. Nor did the mystical idea which led to the blackness of these divinities cease with them. "In the Cathedral at Moulins; at the chapel at Loretto; at the churches of the Annunciation, St. Lazars and St. Stephens, at Genoa; of St. Francisco at Pisa; at Brisen in the Tyrol, and in one in Padua; in St. Theodore, at Munich; in the Cathedral and the church at Augsburg; in the Borghese chapel of Maria Maggiore; in the Pantheon, and in a small chapel of St. Peter's, are to be seen (in Augsburg, as large as life) a black virgin and a black child."* In all this and in many other respects, there is a close analogy between the conception of Umá, the mother of the universe, and that of the Egyptian and of Grecian goddesses, as also that of the Gnostics, the Rosicrucians, Mariolaters and other mystics, whose influence on Christianity is still manifest in the traces they have left on the Roman Church; and they lead to the inference that there has been an interchange of ideas on the subject at an early period.

Máyá, Prakriti, S'aktí.

In Indian philosophical works, the concrete mother Umá passes into the abstract *Máyá* or delusion, *i. e.*, the mystery by which the Great Spirit evolves the universe from within himself. The usual character assigned to that Spirit being a negation of all human faculties, wants and feelings, the mediation of Máyá became necessary to extricate the philosophers from the cocoon which they had woven around themselves. This Máyá then is the power which disturbs the calm repose of the Godhead, and excites him into action, and is, therefore, his energy or power, *(S'aktí)*, or his consort *Prakriti*, or plastic nature. The Vedánta approves the term Máyá as it suits best its nondualistic dogma. The materialistic Sánkhya prefers Prakriti, or plastic nature, as most consonant with its mode of exposition of the mystery of creation; and S'aktí finds the greatest prominence in the Tantras as in accord with a purely anthropomorphic theory. The Puránas adopt the terms at option according to their particular leaning, some giving prominence to Máyá, some to Prakriti and some to S'aktí. They all, however, accept the three words as synonymous. Thus, Umá is the same with Máyá [illegible]i and Prakriti of the Hindus, and with "IO, Isis, Astarte, Ishtar, Mylitta, Sara, Maia, Mary, Meriam, Juno, Venus, [illegible], Artemis, Aphrodite, Hera, Rhea, Cybele, Ceres, Eve, Frea, Frigga," &c., of other nations, everywhere representing the female principle in creation.† She is equal to the Godhead, because creation cannot be accomplished without her, and she is greater than God, because, she sets him into action. "S'aktí gives strength to S'iva; without her he could not stir a straw. She is, therefore, the cause of S'iva."‡ Again, "of the two objects which are eternal the greater is the S'aktí."§ Mysticism revelled in these ideas, and developed them into a variety of forms. By herself Umá is a maiden or mother; united with the Godhead, she produces the androgynous figure of Ardhanáris'vara, the left half of a female joined along the mesian line to the right half of a male figure. Now, Rudra having been identified with the male principle, she necessarily becomes his wife, and as a symbol of the former is the Lingam, that of the latter is Yoni, which appears in art, as the crescent, the star, "the circle, the oval, the triangle, the door, the ark, the ship, the fish, the charm, the cave," various fruits, trees, and a host of other forms alike among the Hindus, the Egyptians and the mystics of Europe. The union of these symbols with those of the male principle, produces the innumerable cabalistic symbols, talismans, amulets and mystical diagrams, which have deluded mankind for ages, and still occupy so prominent a place in the history of religion. The Lingam and the Yoni united is the form in which S'iva appears most frequently in India, and is best known in our temples. It should be noticed, however, that in the more ancient temples, the "upright"‖ or the emblem of the male principle is alone met with. In the great temple of Benares, it occurs to the entire exclusion of the modern symbol of the Lingam and the Yoni united into one.

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* Inman, *Opus cit.*, II., 263.

† *Vide passim*, King's Gnostics, and Jenning's Rosicrucians.

‡ शक्तिः शिवस्य चलकारिणी सदा विना तया स्पन्दितुमप्यकर्मकम्। अतः प्रकृतेरेव शिवस्य कारणं।
S'ankara Vijaya.

§ शिवादर्थोऽर्थेऽर्थे शक्तेरधिकं।
S'ankara Vijaya.

‖ Some are of opinion that the "uprights" are memorial monuments, and not emblems of gods. This theory, however, requires confirmation; it is certain that this is not the case in the opinion of at least some of the aborigines of India. The most dreaded divinity of the Santals is Morang Bura, a sanguinary god, represented by a huge, uncarved, upright stone, who had, until recently, to be propitiated with human sacrifices. The Santals have their traditions regarding the part which this god took in the formation of the earth and the first human pair.

Classification of S'akti.

The theory of S'áktí having once been fully established, all the sectaries adopted it to indicate the spouses of their different divinities, and various classifications were adopted for ranging the female divinities into full manifestations (*Múla-Prakríti* or *Púrṇas'akti*), manifestations in portions (*Ams'arúpiṇí*), in parts (*Kalárúpiṇí*), in portions of parts (*Kalás'arúpiṇí*), &c., &c. The minor sub-divisions include mortal women, and they are accordingly adored as manifestations of the divine mother on earth. This has resulted in several dissolute and licentious systems of religion, in one of which a nude female of youthful age forms the central figure in a circle of mystic devotion. Among the Vaishṇavas, Rádhá was the *Múla-Prakríti*, and the other associates of Krishṇa, her parts; and among the S'aivas and the S'áktas, Umá or Durgá, was the *Púrṇa S'akti*, and her various manifestations her parts, comprising more or less of her spirit or substance. Strictly speaking, this classification would justify the use of the term *S'ákta*, to indicate all those who accept one or other of the female divinities as their tutelary goddess; but in practice the word is confined to those only who follow Durgá and her different manifestations.

S'ivaism and S'áktaism—how they flourished in Orissa.

Founded upon the same sensuous, mundane idea of the influence of the sexes in the creation of the universe, it is but natural to suppose that S'ivaism or the adoration of the male principle, and S'áktaism or the adoration of the female principle, should go hand in hand, and in books they do so; but practically they seem to have flourished almost independently of each other in India. S'ivaism commenced first, and when it did so, S'áktaism seems not to have been much cared for, or at least not to have given rise to a distinct cult, and the oldest monuments of S'iva, have very little of the S'ákta about them. In Orissa, the great seat of S'ivaism was Bhuvaneśvara, and all the great temples there are consecrated to the Lingam, the emblem of the great god Mahádeva, an upright stone without the Yoni accompaniment. The princes of the Kes'ari dynasty, who devoted themselves particularly to this form of worship, wishing to produce a second Benares in the metropolis of their dominion,* confined their attention to S'iva or the upright stone as at Benares, and paid no attention to his consort. S'áktaism found its votaries at a later time in Orissa, and a separate locale was assigned for it at Jájapur; but judging from the remains now visible there, it seems never to have flourished near so well as S'ivaism. In Bengal too, the S'ákta followed long after S'ivaism; and some of its more mysterious and grosser forms do not date earlier than twelve to fifteen hundred years; and when it came into vogue, it seems to have induced even a large number of the old S'ivite to betake to the new faith. This can be easily accounted for. There is a charm in mystery for the mass of mankind, whether it be in quack medicines or in religion, of symbols, diagrams and talismans, which tells much more effectually, much more sweepingly, and much more completely than rational appeal to the understanding ever can do. It "takes the reason prisoner" all at once, and leaves little room for reflection to play its part in a healthy and independent way. Sexual religion, whether in the form of S'áktaism, or that of the doctrines of the Gnostics, Rosicrucians and others, has this advantage to perfection. It requires a greater mass of mystery to envelope its course ideas than even what S'ivaism needed or encouraged, and accordingly it succeeds in a most astounding manner, where the other fails to obtain a footing. Even the most rationalistic of all religionists, the Buddhists, could not resist its allurements, and between the fifth and eighth centuries, compiled and translated a huge mass of Tantras in the Tibetan language, and accepting the sexual doctrine, introduced the worship of several goddesses and degrading ideas of the divinity into Nepal and Tibet, as a part of the esoteries of the Buddhist religion.† S'áktaism in its grosser and repulsive forms of Kaula and Vámáchára cults needs this even more extensively than S'ivaism ever needed or encouraged, and consequently got far ahead of the latter. To prove this I cannot do better than quote Dr. Wilson's estimate of the relative proportions of the followers of the three leading sects of Bengal. "It has been computed," he says, "that of the Hindus of Bengal at least three-fourths are" S'áktas: "of the remaining fourth, three parts are Vaishṇavas, and one S'aivas."‡ This estimate may not be quite correct, and Ward, taking into consideration the fact that the bulk of the people in the eastern districts are Vaishṇavas, reckons the Vaishṇavas of Bengal at one-third of the whole Hindu population; but in either case the figures show very clearly the great preponderance of the S'áktas over the other sects. Nor is this to be wondered at, considering that the great body of the aboriginal races and the lower orders of the people, though not duly initiated in any S'aktí mantra, pay their adoration principally to some form or other, mostly to all the different forms, of Durgá, with scarcely any, or but slender, regard for Vishṇu and his images, and must be included among the S'áktas. In Orissa the case is otherwise. At present, Jagannátha engrosses the attention of the bulk of the people there, and the number of S'aivas and S'áktas is extremely limited. Even at Jájapur, which at one time was a great seat of S'áktaism, whence its name *Virajá-*

* *Vide infra*, Part II., chapter II.

† *Vide passim* CSoma's Analyses of the Gyut in the Asiatic Researches, XX., p. 488 ff., and Hodgson's Buddhism.

‡ Wilson's Essays, I., p. 240.

pítha, the followers of the feminine divinity constitute but a very small section of the community. Perhaps, formerly the case was not so, and there is no doubt that during the reign of the Kes'arí dynasty, the S'aivas greatly preponderated; but the [illegible] zeal of Chaitanya and his followers has long since brought the greater part of the people to follow their faith to the exclusion of all sexual forms of religion. As far as I have been able to ascertain, S'áktas are now more common in Orissa than S'aivas, and the two together scarcely represent one-eighth of the entire Hindu population of that province. Bábu Rangalála Banerji, Deputy Magistrate of Cuttack, who has been in the district for a long time, and has made the subject of the different creeds prevailing there, his study, informs me that "there are scarcely any S'aivas in Orissa. The greater number of the S'ásana Bráhmanas are Vaishnavas of the older, or Vaidika, form. All the other castes are generally Vaishnavas of the Chaitanya or Nityánanda *sampradáya*. There are fifty mandalas of these Vaishnavas in the city of Cuttack alone—each having a band of sankírtana attached to it. They are under the primacy of the great Gossain of Chaitanya at Puri. The Tantras prevail on the Jájapur tract."

Vaishnavism.

Unlike the two preceding forms of religion, Vaishnavism has been intimately associated with Hinduism, and, indeed, has formed its chief feature from a very remote period of antiquity. In the absence of documentary evidence, it is impossible to prove satisfactorily that the name of Vishnu was known to the Aryans and revered by them in their primeval home in Central Asia, but there are reasons to suppose that it was, for it occurs in the Zoroastrian writings, showing that it had got into currency before the Indian and the Iranian branches of the Aryan race had parted from each other. In the earliest Veda, it appears perfectly well known, and in the later scriptures it occupies the most prominent position as an appellation of the Almighty. The Tantras and some of the S'aiva Puránas have, doubtless, given greater importance to S'iva and Durgá, but they have done so generally by identifying, or associating, Vishnu with them, and not by denying the latter his supremacy. It should be added, however, that the cult of Vishnu has not been the same at all times, and the changes it has undergone at different times are so grave and radical, that it appears fundamentally different in its different forms. Its sects and sub-divisions are also very numerous. For purposes of history it may, however, be treated under five heads: 1st, Vaishnavism of the Saṁhitás; 2nd, that of the Bráhmanas; 3rd, that of the time of Pánini and the Itihásas; 4th, that of the Puránas; 5th, that of modern times.

Vaishnavism of the Saṁhitás.

Although, as above stated, the name of Vishnu was well known as that of a great god in the Vedic times, and several hymns are dedicated to the praise of that divinity in the Rig Veda Saṁhitá, his place in the celestial assembly is nowhere well defined. He has no sovereignty over any of the elements nor [illegible] the personification of any object or idea. His principal attributes are thus put together in one of the early hymns of that work: "May the gods preserve us from the place from which Vishnu strode through the seven regions of the earth. Vishnu strode over this (universe); in three places he planted his step; (the world, or his step, was) enveloped in his dust. Vishnu, unconquerable preserver, strode three steps, bearing from thence fixed observances. Behold the acts of Vishnu, through which this fitting (or intimate) friend of Indra perceived religious ceremonies. Sages constantly behold that highest position of Vishnu, like an eye fixed in the sky. Wise men, singing praises, and ever wakeful, light up (by the power of their hymns?) that which is the highest station of Vishnu."* This hymn is held in the highest veneration by the Bráhmanas, and is frequently muttered, or recited, at all the principal ceremonies enjoined in the Vedas. At S'ráddhas, and marital and other rites of the present day, it constitutes the holiest mantra; and seldom is a sacred fire lighted without its being brought to bear upon it. The most important elements of this hymn are the epithets and phrases which assign to Vishnu the attribute of one who "strode through the seven regions of the earth," who "planted his step three times," who "envelopes the world with his dust," who "is fixed like an eye in the sky." Other attributes and functions, such as that of protection here noticed, or of creation of the heaven and the earth, of making of the atmosphere wide, of producing the sun and dawn, elsewhere assigned to him, (I. 154-1-2), belong to him in common with the other gods; but these are peculiar, and they afford a clue to his true character. The counterparts of the phrases, "the god who strode through the seven regions of the earth," and "who planted his steps three times," occur frequently, and in a variety of forms. Thus, Vishnu is described as "the swift goer," "the god of three strides," "the wide-stepping," "the large-pacing," "the swift-moving," "the strider of strides," "the occupier of three stations," "the god within whose three vast paces all the world abides," &c., &c. Commentators are not agreed as to the purport of these epithets. Yáska, in the Nirukta, quotes the opinions of two older expounders, one of whom, S'ákapuṇi, "thought that the triple manifestation of the god, in the form of fire on the earth, of lightning in the atmosphere,

* Rig Veda, I., 22, 16, *ff.* apud Muir's Original Sanskrit Texts, IV., p. 54. Wilson's version of this hymn is somewhat different. Vide his Rig Veda, I., p. 50.

and of the solar light in the sky, was intended" by these epithets; while the other, Aruṇavábha, took them to indicate "the different positions of the sun at his rising, his culmination, and his setting."* Sáyaṇa Áchárya explains them differently in different places, but he understands them to refer to the dwarf incarnation, in which Vishṇu put one foot on [illegible] or on the firmament, and a third, according to some, on the heavens, and according to others, on the head of the Titan Bali, whom he defrauded of his sovereignty of the world to bestow it on Indra. Durgáchárya, in his comment on the Nirukta, boldly asserts that the Vishṇu indicated by the epithets was no other than the sun Á'ditya, whose different positions in the sky at dawn, at midday, and at vesper, referred to by Aruṇavábha, were the three steps alluded to in the epithets. That this is the right interpretation is evident from the phrase used in the hymn which says the deity "is fixed like an eye in the sky." The expression, "who envelopes the world with his dust," has been interpreted by Benfey, in one place, to mean, "the earth was subject to him," and in another place, that "the god is so mighty that the dust which his tread raises, fills the whole earth." But Dr. Muir asks, "Can this dust be understood of the dazzling brightness of the sun's rays surrounding his progress, and obscuring his disk from the view of the observer? The prophet Nahum says, i. 3, "The Lord hath his way in the whirlwind and in the storm, and *the clouds are the dust of his feet.*"† Sáyaṇa sets it down to light, and that the rays of the sun are likened to dust, may be accepted as the true meaning by reference to a verse in the Seventh Book, in which Vishṇu is said to have "enveloped the earth on every side with beams of light." (VII. 99-3.)

This identification of Vishṇu with the sun may be supported by a variety of arguments. In the Śatapatha Bráhmaṇa he is expressly described to be Á'ditya: "He who is this Vishṇu is sacrifice; he who [is] this sacrifice is the Á'ditya." (XIX. 1, 1-6.) In the same way he is identified with Agni, who is the terrene manifestation of the celestial orb. His name is derived from the root *vis* to pervade, *i. e.*, the god who pervades the universe with his light. He is said to have set time in motion. "He has set in motion, like a rolling wheel, the revolutions of time (?) with four times ninety names (days)" (R. V. I. 155, 6), which can be strictly applied to no other than the sun, who makes the four times ninety, or three hundred and sixty days of the year. Elsewhere he is said to "traverse the world," and "traverse it three times," to "thrice measure the mundáne regions," all referring to the apparent diurnal motion of the sun. Again, the Bráhmaṇas reckon twelve Á'dityas sons of Aditi, by Daksha; and the last of these is named Vishṇu in the Mahábhárata and other later works. The Harivańśa, not to detract from the rank of Vishṇu, says, that "though he is the last born, he is not the last," and the Mahábhárata elsewhere adds, "though the latest born, he surpasses all the Á'dityas in his attributes." (I. 2, 519, 2, 522.) The Aitareya Bráhmaṇa, in the same way. "Vishṇu, calls the greatest," *Vishṇuḥ Paramaḥ.* Haug is not satisfied that the word *paramaḥ* in this verse is indicative of the celestial rank of Vishṇu.‡ He takes it to imply the position of Vishṇu the sun, high in the sky in comparison to that of Agni, who is said to be the lowest *(Agnir avamaḥ)*, because he is the god of the earth. But interpreted with the help of the Mahábhárata, there is nothing inconsistent in the attribution of the epithet in the sense of the greatest to Vishṇu.

Objections to the identification of Vishṇu with Á'ditya considered.

It has to be admitted that Vishṇu is not noticed among the Á'dityas in the Rig Veda hymns, but there, only seven or eight Á'dityas are named, and Vishṇu, as the last of the twelve, could not expect to find a place among the earlier ones. In the same way, where in the Mahábhárata only eleven suns are named, Vishṇu is excluded, he being the twelfth.

Exception might also be taken to the identification of Vishṇu with the sun, the greatest god of the Aryans, on the ground of his having been made the theme of a very few hymns only. Dr. Muir, after quoting or referring to nearly all the hymns of the Rig Saṁhitá, says, "It is also a fact, notorious to all the students of the Rig Veda, that the hymns and verses which are dedicated to the praises of Indra, Agni, Mitra, Varuṇa, the Maruts, the Aśvins, &c., are extremely numerous; whilst the entire hymns and separate verses in which Vishṇu is celebrated are much fewer. * * * The reader will also have noticed that, in a large number of shorter passages which I have cited, Vishṇu is introduced as the subject of laudation among a great crowd of other divinities from whom he is there in no way distinguished as being in any respect superior. From this fact we may conclude that he was regarded by those writers as on a footing of equality with the other deities."§ These objections do not, however, stand much in the way of the identification. It is universally admitted that Mitra and Pushan are names of the sun, and since their identity is by no means invalidated by the fact of the entire hymns and separate verses dedicated to Mitra and Pushan being comparatively limited, the same may very fairly be said in the case of Vishṇu. If Vishṇu be, as he is here assumed to be, but another personification of the sun, every hymn, whether addressed

* Muir, Original Sanskrit Texts, IV., p. 57.
† Idem, IV., p. 55.
‡ Haug's Aitareya Bráhmaṇa, II., p. 1.
§ Idem, IV., p. 85.

to S'urya, A'ditya, Mitra, or Pushan, is *ipso facto* addressed to him, and it would not be reasonable to expect that the number of hymns or verses on account of each name should bear a fair proportion to the others. It may even be admitted that Vishṇu had not obtained the same importance at the time when the hymns were composed as S'urya or A'ditya, but that would not contradict or militate against the identification. The fact of Vishṇu's being placed on an equality with the other gods, is also not antagonistic to his being the same with A'ditya, for A'ditya himself is so treated in a large number of verses without in any way detracting from his lofty position as one of the three principal gods. It is well known to Vedic scholars that the hymns generally speak in the superlative degree, and extol the immediate subject of their laudation with the highest praise without any reference to its actual rank, or the attributes elsewhere assigned to the other gods. Adverting to this circumstance, Dr. Muir justly observes: "When these individual gods are invoked, they are not conceived as limited by the power of others as superior or inferior in rank. Each god is to the mind of the supplicants as good as all the gods. He is felt, at the time, as a real divinity, as supreme and absolute, in spite of the necessary limitations which to our mind, a plurality of gods must entail on every single god. All the rest disappear for a moment from the vision of the poet, and he only who is to fulfil their desires stands in full light before the eyes of the worshippers. 'Among you, O gods, there is none that is small, none that is young: you are all great indeed,' (R. V. VIII., 30, 1,) is a sentiment which though, perhaps, not so distinctly expressed as by Manu Vaivasvata, nevertheless underlies all the poetry of the Veda. Although the gods are sometimes distinctly invoked as the great and the small, the young and the old, [R. V. I., 27, 13] this is only an attempt to find the most comprehensive expression for the divine powers, and nowhere is any of the gods represented as the slave of others."*

It may be reasonably argued that if Vishṇu be the sun, why should he appear as distinct from A'ditya, Mitra, and Pushan? If the different gods are the same, why are they not at once said to be so? Why are they described with different attributes under different names? The replies to these questions occur in the fact that such has been the nature of mythology in all countries. The Greek Pantheon, no less than the Hindu, was peopled by a small number of gods, increased manifold by a variety of names and attributes. Each set of attributes constituted a separate divinity, though essentially the individual intended was the same with another, or several others. According to the ancient Indian theory there were only three gods, Agni, Váyu, and Súrya, and as often as they got separate designations and separate attributes, so often they became separate, multiplying to thirty-three at first, and to as many millions afterwards. Again, in course of time and by changes in the feeling or modes of thinking of the worshippers, some names got greater prominence than others, and the backward ones got gradually neglected, and ultimately forgotten. Pushan and Mitra in this way have now become quite obsolete, though it is undeniable that they were among the foremost of gods in early times, both among the Indo-Aryans and the Iranians, and then they were well known to be forms of Súrya. It is evident that Vishṇu has had great advantage in this respect, and that from being at one time the name of one of the personages of the earliest, or Vedic, trinity of Agni, Váyu and Súrya, he became in the Bráhmanic period one of the later trinity of Brahmá, Vishṇu, and S'iva, in which his attribute of protection, which at first he enjoyed in common with several others, was made his special distinctive characteristic, and subsequently in the Itihása epoch rose to the dignity of the supreme divinity, which he now claims, and has done for several centuries among a large number of votaries. In this we have only an instance of the peculiarity of mythology which has manifested itself times without number in connexion with the history of religion, and not a fact that need at all raise any doubt as to the true character of Vishṇu in Vedic times. It is in the nature of mythological religion to develope or rehabilitate old ideas, to change names, give prominence to particular attributes, and cast others into oblivion, and this is exactly what we find in the new triad. The three were not new gods, but the old ones under new names: Brahmá is no other than Agni, with the special attribute of creation; Vishṇu is Súrya, with the rôle of protection; and S'iva is Váyu, with that of destruction. Váyu, first changed to Indra, then to Rudra, and lastly to S'iva,—first, the god of wind, then that of the firmament or master of storms and clouds, then that of all that is terrible, and lastly that of universal destruction.

Vaishṇavism of the Bráhmaṇas.

In the Bráhmaṇas, Vishṇu ceases to be a mere name or attribute of the sun, and appears in the character of a distinct god with a well-defined personality. His original great feat of traversing the universe by three steps is all but entirely lost sight of, and if he is still reckoned an integral member of a triad, it is not the old one of Agni, Váyu and S'urya, the threefold symbols of an unknown and inscrutable divinity, but of a new theogony with a different rôle. He is also the subject of several elaborate myths in which he assumes parts which have nothing to do with the sun. One of them, in the S'atapátha Bráhmaṇa, relates how he became pre-eminent among the gods,

* Original Sanskrit Texts, IV, p. 100.

and how he lost his head. The story is repeated in the Taittirya Bráhmaṇa with some variations.* Another in the Aitareya Bráhmaṇa† makes him the door-keeper of the gods; a third in the S'atapátha Bráhmaṇa describes him as hiding himself near the root of a tree, three fingers' depth below the earth, and recovering, from the As[illegible]s, [illegible] world for the Devas.‡ In all these he is identified with sacrifice, and not related to any solar myth. In the last story we have the first germ of what was afterwards developed into the myth of the Dwarf Incarnation, in conjunction with the epithet *trivikrama* or 'the god of three steps.' It does not appear, however, that during the epoch under notice Vishṇu had so far alienated himself from the other gods as to be the divinity of a separate cultus: he was one of the members of the celestial host, and received his share of adoration and offerings in common with the rest.

Vaishṇavism of the time of Páṇini and the Itihásas.

Turning now to Páṇini and the Itihásas, *i. e.*, the Rámáyaṇa and the Mahábhárata, we find not only a distinct cult having Vishṇu for its object of adoration, fully established, but the doctrine of his incarnation put forth with great confidence. Páṇini was familiar with the names of some of the principal personages in the history of Krishṇa, and adduced the names of Krishṇa, Pradyumna, Arjuna, Aniruddha, Vásudeva and Subhadrá to illustrate his rules,§ and, in illustration of one, which says that "the affix *kaṇ* should be elided when livelihood is implied," he observes "those objects which are taken about from house to house, by idol-worshippers to earn a livelihood are called images of gods," *(deva-prakritayah)* and then adds by way of example *Vásudeva*, *S'iva* and *A'ditya*, or carriers of idols of Vásudeva, S'iva and A'ditya,‖ showing clearly that in his time not only separate sets of sectarians of the three gods were fully established, but that some of them earned their livelihood by carrying about idols as a means of begging. It proves also that Vishṇu at the time had been so thoroughly identified with Krishṇa, his alleged incarnation, that he was indicated by the derivative name, son of Vásudeva, and not by his own original designation. In another passage salutation to Krishṇa is enjoined as calculated to make a journey pleasant.¶ In a third, the word Vásudeva is explained as meaning a person, who is devoted to, or has faith in, Vásudeva.** These passages are of considerable importance as proving the currency of the Krishṇa cult from before the time of Páṇini, or over a thousand years before the commencement of the Christian era. If we accept Max Müller's low estimate of the age of Páṇini to be the right one, it would still take us beyond the sixth century before Christ. The passages, it is true, occur as examples, and Goldstücker demurs to the historical value of those portions of Páṇini's work in which examples are given; but regarding them, Max Müller very justly observes: "It was impossible to teach or to use Páṇini's Sútras without examples. These necessarily formed part of the traditional grammatical literature long before the great commentary was written, and are, therefore, of a much higher historical value than is commonly supposed."†† But this argument apart, the distinction which Brindávaṇa and Mathurá, particularly the latter, the seats of some of Krishṇa's early exploits, attained at an early epoch, as holy cities, and the references made to them by Greek authors, such as Arrian and Pliny, show that the Krishṇa cult had become popular and current long before the time of the Greek invasion.

Opinion is divided among European orientalists as to the respective ages of the Rámáyaṇa and the Mahábhárata, and also about the authenticity of the passages in those works which assign divine origin to Ráma and Krishṇa, and it is not my intention to enter into a chronological dissertation about them in this place, but whatever their age and authenticity, this much is undeniable that they fully recognise the divinity of Vishṇu, and of his being the object of special adoration to a large number of sectaries. Nor are evidences wanting in those works, of a strong spirit of bigotry and antagonism having prevailed in their times between the followers of Vishṇu and S'iva. These evidences appear under different forms, but their tendency and purport are unmistakable. Thus in one place, the Rámáyaṇa makes Parusaráma relate a story in which it is said that on one occasion, "the gods made a request to Brahmá, desiring him to find out the strength and weakness of S'ítikaṇṭha (Mahádeva) and Vishṇu, and Brahmá, most excellent of the three, learning the purpose of the gods, created enmity between the two. In this state of enmity, a great and terrible fight ensued between S'ítikaṇṭha and Vishṇu, each of whom was eager to conquer the other. S'ivá's bow of dreadful power was then relaxed, and the three-eyed Mahádeva was arrested by a muttering. These two eminent deities being entreated by the assembled gods, rishis, and charaṇas, were pacified. Seeing that the bow of S'iva had been relaxed by the prowess of Vishṇu, the gods and rishis

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* Ibid IV., p. 110.

† Ibid IV., 114.

‡ Ibid IV., 108.

§ Ibid IV., 2, 56, IV., 1, 114, IV., 398.

‖ जीविकार्थे चापण्ये। वासुदेवः। शिवः। आदित्यः। देवलका जीविकार्थं याः परिगृह्य गृहाद् गृहमटन्ति ता देवप्रतिकृतय उच्यन्ते ॥ ५ ॥ २ ॥ ९९ ॥

¶ कृष्णं नमेच्चेत् सुखं यायात्। कृष्णं नमस्यति चेत् सुखं यास्यति। अत्र कृष्णनमनं हेतुः सुखयानं हेतुमत् । २ । २ । १५६ ।

** वासुदेवो भक्तिरस्य वासुदेवकः । ४ । ३ । ९८ ।

†† Ancient Sanskrit Literature, 40.

esteemed Vishṇu to be superior."* Other stories of a similar character are not by any means scarce, but it is not necessary to quote them here, as it is not likely that anybody will question the fact that religious antagonism between the Śivites and Vaishṇavites [illegible]gu at the time of the Rámáyaṇa and the Mahábhárata.

The ritual of this Vaishṇavism was probably the same which we see described in the tenth Book of the Taittiriya Áraṇyaka. Set forms of prayers at morning, noon and evening, offerings of fruits, flowers, water, &c., special mantras, and modified forms of gáyatrí were its chief elements, resulting in the substitution of faith for knowledge. This was the natural consequence of rigid obedience to set forms under a domineering hierarchy. Revealed religion, in such cases, generally requires an unlimited degree of faith, and it was promoted by a spirit of proselytism which polemical antagonism usually engenders. Not that the religion of the Vedas did not insist on a great amount of faith; it did so to a large extent; nevertheless the old belief was that an intelligent understanding of the nature and object of ceremonies was necessary to perfect fruition, and the leading Upanishads laid particular stress upon this point; but it was by no means a convenient dogma for the conversion or control of large masses of men, and a more summary means of governing the mind of the lower orders, was greatly needed, and this was found in the maxim of unswerving and unquestioning faith, or *Bhaktí*, as a substitute for knowledge. The Bhagvadgítá gave it great prominence, by pointing out the inefficacy of practical worship enjoined in the ordinances of the Smriti, and the advantage of absolute devotion to the service of God; and Śándilya reduced it to a system in his Aphorisms on the subject, *(Satasútra)*, in which he "rejects the Hindu (gnostic) theory, that knowledge is the one thing needful, and contends that knowledge is only the handmaid of *faith*."† The *bhaktí* or faith advocated by him was however, not a mere principle of belief, or action in consonance with the requirements of that belief, but an earnest, unflinching, vehement devotion, such as, in the case of worldly matters, is indicated by the word passion, and in a moral sense by pathos. Śándilya defines it as "absolute devotion to God,"‡ and Svapneśvara explains the devotion by describing it as "a function of the mind with reference to the Supreme Being similar to what is evinced in regard to worldly objects under particular circumstances,"§ a feeling similar to what is engendered—to use a tough phrase of Aristotle—by our concupiscible appetites, but bearing a closer affinity to his *βουλησις* or rational appetite, or the *θυμὸς* of Plato as distinct from his "*ἐπιθυμία*—an earnestness connected with the rational and immortal part of our nature, and stimulating to the pursuit through God of good and the avoiding of excess and evil." The most important peculiarity of this devotion or theopathy is its entire freedom from reason: it admits no argument, or discussion, or consideration as to the reasonableness of the action prompted by it: it is an unreasoning and absolute belief,—an unqualified and entire resignation of the mind—which is so sublimely expressed in the language of the English prayer: "Lord, Thy will be done." Its chief object was to override the dialectics of the philosophers, who discarded the promptings of the mind in their schemes of salvation, and to substitute a religion of the heart for one of reason,—of one much better calculated to command sympathy than either the rites of the Vedas, or the teachings of the Sáṅkhya, the Nyáya and the Vedánta. The full effect of the innovation did not, however, manifest itself until a later stage in the history of this system of religion.

Vaishṇavism of the Puráṇas.

The Puráṇas, in their account of Vaishṇavism, do not differ much from what we believe it to have been at the time of Páṇini and the Itihásas. They dwell at length on various manifestations and incarnations of the Divinity, some including his entire essence or spirit, others a portion of it. This must have taken place at least two thousand years ago, for the Eran boar dates from the second century of the Christian era, and then the boar incarnation was an object of worship, and the sovereign who dedicated it and some of his ancestors are described in the inscription on its back as Bhágavatas, or followers of Vishṇu.‖ They insist on the worship of Ráma and Krishṇa,¶ who are unquestionably identified with Vishṇu, and unflinching and unreasoning faith of the Bhaktí system the greatest, and indeed the sole means of salvation. They also dilate largely on the identity of the three leading gods, Brahmá, Vishṇu and Śiva, though the followers of those divinities, it would seem, cherished the most implacable rancour and enmity against each other. In all this the Puráṇas are in accord with the Mahábhárata which they follow; but in the treatment of the dogma of Bhaktí, they go far ahead of their predecessors. Associating it with the Vedantic doctrine of the relation of the human to the Divine soul, they—the Bhágavata particularly—have developed a system in which the passions of affection and love are brought to bear upon the Divinity more prominently and earnestly than religious

* Muir's Original Sanskrit Texts, IV., p. 147.

† Ballantyne's Christianity contrasted with Hindu Philosophy, p. iii.

‡ या परानुरक्तिरीश्वरे।

§ परमेश्वर विषयकात्मकरणधर्म विषय एव भक्तिशब्देषेयं च लौकिकानुरागादीक्षणम्।

‖ Journal As. Soc. XXX. 20. The date of the record is 165 years, but the era is not indicated, and antiquarians are not decided as to what it refers to, but some bring it down lower than the third century of the Christian era.

¶ The Vishṇu Puráṇa describes Krishṇa, as an *Áśáṅśatáṁśa* or a manifestation of a part of Vishṇu; *Áṅśaṅśatáṁśa Bráhmaraśe yo yaṁ Yadukulodbhavaḥ*: but the Bhágaváta takes him to be *Purṇa Brahma*, or Brahma in his entirety. The difference is reconciled by the commentators, by the assertion, that even as a lamp lighted from another, does not abstract from the light of the first, and yet is as bright as the first, so the divine spirit, which has the character of light, cannot suffer diminution or enhancement. Hence, "a full arises out of a full; if a full is taken from a full, a full remains." Vide Muir's Original Sanskrit Texts, IV., p. 219.

devotion, and the Godhead is represented in such mystic, allegorical language as to thinkers of the present fastidious age appears highly unbecoming, insulting, licentious, and even blasphemous—in which the substitution of the impassioned eloquence of the poet addressing his mistress for the sober language of respectful adora[illegible] Deity, is held the most sacred. This is the result of a "hypertrophy of the religious feeling" which envelopes the religious sentiment with the charms and imagery of mundane life—of an excessive fervour of devotion, which, rising above all the amenities of sober society, longs to hold communion with the Godhead, in a manner of which sexual love is the most perfect type known to man. Poets of ancient times indulged in a variety of fanciful and voluptuous imageries in describing matters celestial, and a too literal, or materialistic, or spiritual interpretation of their allegorical language, led either to the formation of myths, or the development of mysticism of various kinds. The allegories of the Vedas have, without a single exception, been elaborated into myths in after ages, and not a few of them form the basis of mystical dogmas. In Egypt, Assyria, Babylon, Greece and Rome, ancient poetry went through the same course of transformation, and the result was very much the same. Allegories on religious subjects, when not otherwise explained, have been looked upon as mystic, and the Song of Songs of Solomon has always been looked upon as a remarkable specimen of this species of composition, typifying under the figure of a marriage the intimate connexion between God and His Church. The Prophets Isaiah, Jeremiah and David use the same kind of mystic allegory,* and instances of this description from the Old Testament may be easily multiplied. The mystical character of the Song of Solomon may be compared with that of the Pastorals of Jayadeva, designed, like the Song in question, to illustrate the longing of the human soul for communion with the Divine. The late Dr. Adam Clarke was so struck with the comparison between the *Gítagovinda* of Jayadeva and the Song of Solomon, that he inserted the whole poem in his commentary on the Bible with this introduction: "*Gítagovinda.*—A mystical poem supposed to have a near resemblance to the Book of Canticles, many passages of which it illustrates. There are few turns of thought in the Song of Songs that may not find a parallel in the Gítagovinda, and even the strongly impassioned language of Solomon may be everywhere supported by that of Jayadeva and *vice versâ*." The eminent linguist and Biblical critic, Dr. Mason Good, in his translation of Sólomon's Song, has illustrated many passages of it from the Gítagovinda; and Hartwell Horne, whose Introduction to the Scriptures is a text-book in the principal universities of England and America, and a knowledge of which is required by the Bishops from candidates studying for orders, remarks: "In further confirmation of the preceding view of the spiritual design of this sacred oriental poem, we may observe that this allegoric mode of describing the sacred union between mankind at large, or an individual and pious soul, and the Great Creator, is common to almost all Eastern poets from the earliest down to the present age. Without such an esoteric or spiritual interpretation, it is impossible to understand many passages of the Persian poets, Sádí and Háfiz, and the Turkish commentators on them have uniformly thus interpreted them. A similar emblematic mysticism is equally conspicuous with the bards of Indra, and the Vedántic or Hindu commentators have, in like manner, attributed a double, *i. e.*, a literal and spiritual, meaning to their compositions. This is particularly the case with the Gítagovinda or Songs of Jayadeva, the subject of which is the loves of Krishna and Rádhá, or the reciprocal attraction between the Divine goodness and the soul of man, and the style and imagery of which, like those of the royal Hebrew poet, are in the highest degree flowery and amatory."†

The language of such mystical poetry, whether it be of Solomon, or Háfiz, or Sádí, or Jayadeva, or the Bhágavata, is necessarily rich and voluptuous, and is apt to be misunderstood by expositors unable to enter into the spirit of oriental poetry; but, as justly observed by Scott, the most popular commentator in the English Church, such "descriptions must not be judged by modern notions of delicacy, which, in a very vicious age, is apt to be fastidious." A remarkable instance of this fastidiousness and prudery is afforded by the American Episcopal Church which, impelled by them, was led to exclude from their edition of the English Prayer-Book, a passage of the "Te Deum" which had been repeated with devotional feeling by the Holy Church throughout the world for fifteen centuries, and which, in the present day, English ladies of the most refined feeling read without any improper idea being excited. Judged by such a standard, the language of the Bhaktí system must appear peculiarly offensive, but where no wrong is meant, it would be unfair to insist on an interpretation which cannot but lead to wrong.

Modern Vaishnavism.

Thus though the mystic system of Bhaktí was first promulgated by the Bhagavadgítá as early as the time of the Mahábhárata, and fully developed in the Sándilya Sútra and the Bhágavata Puráṇa, it does not seem to have effected any material change in the form of the current Vaishṇavism of the country for a long

* Isaiah liv. 5, 6; lxvii. 5.
Jeremiah ii. 2; iii. 1.
Psalm xlv.
Revelation xxi. 2, 9.

† Works, III., p. 138.

time. Hermits and sages, in their monastic seclusion, indulged in its mystic reveries; but the great body of the people adhered to the established ritual, and satisfied their religious craving with the mantras and sandhyás which their ancestors had followed. [redacted]arya was the first who attempted to give a wide circulation to the mysticism of Bhaktí, and he was followed by Jayadeva in Bengal, and Rámánuja in Southern India, both in the twelfth century. Then came Vallabhácharya, Mirá Báyi, Mádhváchárya, and Chaitanya between the fourteenth and fifteenth centuries, and they so completely changed the character of Vaishnavism, as to give it quite a new shape. Songs, music and dancing replaced the mantras of old, Sanskrit prayers gave place to vernacular ones, and service to images of Krishna in various forms to established rituals. Even the name of the followers of the new faith was changed from Vaishnavas to *Bhaktas*, or the theopathists, *i. e.*, the followers of the Bhaktí creed.

The history of the Bhaktí system as sketched above, leaves no doubt about its independent origin, but the close family resemblance which it bears to Sufiism, and the time when it came into vogue, would suggest the possibility, or likelihood, of its having borrowed its traits, at least some of them, from the Muhammadan saints of India. To judge of this we must compare the leading features of the two systems.

It is abundantly manifest that both are the results of the same process of thinking and of the same state of the religious feelings. Both the Sufi and the Bhakta alike yearn for communion with a beneficent creator, and assume an ardent and enthusiastic love for him to be the only means through which that union is to be effected. The one is as thorough an optimist as the other. The Sufi represents himself as entirely devoted to the search of truth, and perfectly independent of the ordinances of the canonical law; so does the Bhakta. A blind submission to the opinions of the Khalifá is a peculiar characteristic of Sufiism. Its followers "are invited to embark in a sea of doubt under the guidance of a sacred teacher, whom they are required to deem superior to all other mortals, and worthy of a holy confidence that borders upon adoration." With the Bhakta the case is still more impressive. "Of all obligations," says Professor Wilson, "the *Guru Pádáśraya*, or servile veneration of the spiritual teacher, is the most important and compulsory: the members of this sect not only are required to deliver up themselves and every thing valuable to the disposal of the Guru, they are not only to entertain full belief of the usual Vaishnava tenet, which identifies the votary, the teacher and the god, but they are to look upon the Guru as one and the present Deity, as possessed of more authority even than the Deity, and as one whose favour is more to be courted, and whose anger is more to be deprecated, than even that of Krishna himself."* A literal interpretation of this principle by the high priests of the Vallabhácharya sect has resulted in the licentiousness of the Mahárája Gossains of Western India.

The Sufi knows no distinction of caste, nor does the Bhakta. Chaitanya freely admitted Mongols and Patans within the pale of his sect, and invested them with a sanctity which few even of his Bráhmana followers could venture to assume. "A total disengagement of the mind from all temporal concerns and worldly pursuits," is insisted upon as a *sine qua non* both by the Sufi and the Bhakta, and none can assume the *Khirká* or the *Kanthá* without first submitting to this primary condition. Fasts and penances are alike despised by both, and yet both pass their lives in one eternal round of privations. They are voluptuaries in thought and expression, and allegories and love songs and ghazals figure prominently in all their writings. Concerts, both vocal and instrumental, are their special favourites. Chaitanya repeatedly insists upon the miraculous effect of *Sankirtana* in training the mind for divine communion, and devoted much of his time to religious singing and dancing. Fainting in ecstatic devotion is another peculiar characteristic common to the two sects, and innumerable instances are on record of Chaitanya, Mansúr Heláj and their followers, swooning away in fits of religious enthusiasm. Nor is this peculiarity confined to the great teachers alone; even neophytes of very moderate pretensions lay claim to this mark of sanctity. When Sufis fall into this condition "the Sheikh, aided by his Vicars, employs no other means to draw them out of this state of unconsciousness than to rub their arms and legs, and to breathe into their ears the words *Lá iláha ill'Allah*."† The swooning of a Bhakta is called *daśáprápti*, and the only remedy resorted to for reviving him is the repetition of the name of Rádhá and Krishna near his ears. Chaitanya was particularly subject to these fits, and one of them, coming on whilst he was bathing in the sea near Puri, cost him his life.

The Bhaktas believe that for the attainment of supreme beatitude, they must pass through five stages or states of probation. The first of these is called *S'ánta* or quietism, or a state of calm contemplation of the Deity. The second is *Dásya* or servitude, which in a more active state leads on to the third or *Sákhya* or friendship, and that in its turn to the fourth or *Vátsalya* (filial affection), and lastly to *Mádhurya* or love, when the devotee, rising above all idea of divinity, entertains the same ardent attachment for the Deity which a human lover feels for the object of his love, or "what the milkmaids of Vrindávan entertained for their charming Krishna."

* Hindu Sects, p. 103.

† Brown's Dervishes, p. 224.

With the Sufi the gradation is similar, but not identical.* He has only four states of probation. With him the first is *Násút*, or humanity, in which the disciple, subjecting himself to the canons of his faith, attempts to purify his soul by the practice of religion. It may be compared to the Dásya of the Bhakta. The second is *Jabrut* when, [illegible] exercise the preceding stage, the devotee attains power to abandon the observances of religious forms and ceremonies, as he now exchanges, to use their own phrase, "practical for spiritual worship." Its relation to the third stage of the Bhaktas, our Indian Sufis, when they, rising above the ordinances of the Smriti, profess themselves to be the friends of the Deity, is evident. The next is a state of knowledge *(A'raf)* of which extreme sanctity is the peculiar characteristic. It has its counterpart in the Sánta of the Vaishnavas. The last state of Sufi excellence is *wasil* or union with the Deity, and in this the Sufis apparently differ from the [illegible]. The former, adopting the doctrine of the modern Vedántists, believe the supreme cause of all to bear the same relation to the human soul which the sun does to its rays; that like unto the solar rays, emanations from the Divine Soul are continually darted forth and re-absorbed, and that this absorption to the primary essence is the great end and object of their religion. They hold that when in the state of *wasil*, a Sufi saint has thoroughly understood the relation of his own self to the divinity, he might with propriety proclaim of himself, "I am the truth" [*An ul hayj*], just in the same way that the Vedántists do the Vedic dogma of *Sohamasmi*, "I am he;" "*Aham Brahma*," "I am Brahma," and the like. While the latter maintain that the human soul is distinct and radically different from the Divine one, although possessing in some measure its nature, both being uncreate and eternal, and that a state of fellowship with the Deity in one eternal round of divine felicity, is the highest reward of their religion.

This difference, however, is more nominal than real; for notwithstanding their belief in the doctrine which maintains the identity of the divine and the human soul, the Sufis are very uncertain as to the exact nature of the union they so passionately long for. One of the greatest saints of this order, whose mystic poetry is held in the highest veneration, Mowláná Jeláluddín Rúmi, has a verse which entirely scouts the idea of actual absorption into the Deity. He writes:—

"Now, mystic Lovers! with strange delight,
To heavenly mansions wing your rapturous flight;
Tread, of you halls august, the marble floor,
Behold the ETERNAL FAIR, and face to face adore."

The similitude of the two systems is so far very close; and arguing on it, it would not be unreasonable to infer a relationship between them. But on the one hand, the Bhakti system dates, as stated above, from the time of the Bhagvadgítá, br many many centuries before the advent of Muhammad, from which epoch it has gradually and steadily developed itself, and there is nothing to prove conclusively that the characteristics of Vaishnavism as popularised by Chaitanya, were not drawn from the Hindu S'ástrás. In the Chaitanya Charitámrita and other leading works of the sect, all the leading doctrines and rules of ceremonial observances are supported by quotations from the Puránas and other works, which existed from some time before the advent of the Muhammadans into India, and it would follow, therefore, that the rules and doctrines are of Indian origin. On the other hand, the history of Sufiism is involved in obscurity; nothing is known of the first promulgators of the system and of its subsequent progress till the time of Sheikh Mohiuddín 'Alí, who in the middle of the eleventh century published his "*Futúhát i Makkí*" and "*Fusús ul Húkam*," which have ever since been reckoned as the text-books of the sect. *Allah o bas*, "God and nothing else" is a favourite dogma of the Sufis, and they ascribe it to Abu Saíd Abul Khair who lived about nine hundred years ago. Some of them maintain that Muhammad was the first promulgator of their religion, and was himself a Sufi of the highest order. That the Prophet of Mecca was a theopathist of the highest order, and that he was greatly aided in the dissemination of his religion by a body of ardent enthusiasts, there can be no doubt, and that he inculcated many pantheistic dogmas, admits of proof; but whether they owe their paternity to him or to a foreign source, and how far they assimilate to the doctrine of the modern Sufis, are problems which still await further research for their solution.

Further, *á priori* the presumption is strong, that Sufiism owes its origin and a good many of its details to the Bhaktiism of India, and a host of European writers have adopted this view of the question. Sir William Jones was the first to notice the analogy between the two creeds, and others have since dwelt on it at more or less length. Mr. Brown, in his History of the Dervishes, says: "The subject is not a new one. It can be traced in the Old and New Testament, as well as in the Korán, and, I fully believe, is peculiar to the learned ranks of the people of India, from whence it entered into Arabia and Persia. It has its origin in the belief that man's spirit is a Divine emanation, and, under certain peculiar circumstances, is possessed of a

* See Capt. Graham's paper on the Sufis in Vol. I. of the Transactions of the Literary Society of Bombay, to which I am indebted for much of what is written above of these pantheistic visionaries.

Divine faculty disconnected with his corporeal part, and, therefore, attributed wholly to his spiritual."* Arguments, however, are not wanting to support an equally strong presumption in favour of the theory which would trace its source much [redacted] well-known that even during the early apostolic age many Christian professors were deeply imbued with mystic ideas about religion, and that they promulgated them so widely that for a long time those ideas rivalled the Christian faith in their currency. Herder, Ewald, De Wette, Renan and others are of opinion that the Song of Songs was originally understood in a literal sense, and that it was only in the first century of the Christian era, when the spirit of mysticism was rampant among a certain class of Christians, that it was subjected to allegorical treatment. The Gnostics were particularly remarkable for their devotion to mysticism, and the Syrian school of that sect flourished to the end of the sixth century, and there was nothing to prevent the Muhammadans from b[redacted] the dogma of mystic adoration from them. Several Sufi terms are of Greek origin, and they must have been derived through the medium of Syrian Christians. Even the very name of the sect seems very like a Greek one. It is usual to derive it from *suf*, "coarse wool," the material of which the clothing of the Sufis is usually made; but this is not to the liking of the Sufis, and they say it means "pure," and one may without any violence recognize in it the σοφια of the Gnostics—"that female of heavenly origin who, awakened to a consciousness of her spiritual character, watches over man, and never ceases to impart to him fresh supplies of spiritual influence, which it is the aim of Jaldabaoth to crush and destroy." The question is, however, one that does not much concern the object of the present essay, and it may, therefore, be left for future enquiry, particularly as at present, I believe, there are not data sufficiently explicit and harmonious in their evidence satisfactorily to meet the requirements of the case.

Of the several phases of Vaishṇavism above noticed, the Bhaktí system of Chaitanya is what now prevails most in Orissa. Chaitanya spent the last twelve years of his existence at Púrí, and by his zeal, sanctity, and influence over the people, gave great éclat to the worship of Jagannátha. He converted to his faith Pratáparudra, who was the sovereign of Orissa at the time, and through him effected a great many changes in the daily service of the god, and gave wide currency to his faith. To him is due the practice of reciting the Gítagovinda daily at the entrance to the temple, and on the whole Jagannátha is greatly indebted to him for the world-wide reputation he enjoys. Not that the dogma of Bhaktí was not unknown at Púrí before his time; on the contrary, there is reason to believe that it was synchronous with the foundation of the present temple under the orders of Anangabhíma Deva in the middle of the twelfth century; but Chaitanya's preachings did much to bring it home to every one, and popularise it among the people of Bengal from whom he had proceeded, and that of Southern India for whose conversion he laboured hard, both personally and through his chief disciples. How long before that the Pauranic system prevailed, is a question which will form the subject of enquiry in a subsequent chapter.

Heliolatry.

The earliest god of the Aryans was the great luminary of the day, the manifest symbol of the unmanifest Divinity, who creates and sustains the universe. What his first name exactly was, we know not; but there is little doubt that it was formed of a root like *sur* or *sar* or *srí* whence the Greek ἥλιος and the Latin *sol* by the regular mutation of the *s* and *r*, and Súrya was one of his earliest names according to the Rig Veda Saṅhitá. How Súrya changed into Vishṇu has already been shown, and as Vishṇu rose to importance, Súrya *alias* A'ditya fell back, till in the time of the Puráṇas he was relegated to a very subordinate position, and the bulk of his worshippers ranged themselves in the ranks of the followers of Vishṇu, S'iva and S'aktí. A few only remained faithful to him, and continued to adore him for their salvation, and these were known by the name of S'aura or the worshippers of Súrya, who, according to the Puráṇas, formed one of the five leading sects of the Hindus, *viz.*, the Vaishṇavas, the S'aivas, the S'áktas, the S'auras and the Gáṇapatyas. Their number, however, daily contracted, and [redacted] the beginning of the twelfth century, Haláyudha, in his *Bráhmaṇa Sarvas'va*, or the circle of the duties of Bráhmaṇas, but barely mentioned them without giving any details about the initiation of neophytes into that sect; the sect being so insignificant as not to render it worth while to devote to it even a small section in a large work professing to treat of the entire subject of the religious duties of the Bráhmaṇas. Raghunandana, who wrote three hundred and sixty years ago, is equally brief, noticing the sect but casually, without entering into any detail. In the present day, no S'aura is to be met with in all Bengal or Orissa, and only a few are said to exist in the North-Western Provinces, and they number, perhaps, one in a hundred thousand of the people. Adverting to them, Wilson says, "There are a few of them, but very few, and they scarcely differ from the rest of the Hindus in their general observances. The *Tilaka*, or frontal mark, is made in a peculiar manner, with red sandal, and

* The Dervishes, p. 7.

the necklace should be of crystal: these are their chief peculiarities: besides which, they eat one meal without salt on every Sunday, and each *sankránti* or the sun's entrance into a sign of the zodiac: they cannot eat either until they have beheld the sun, so that it is fortunate that they inhabit his native regions."* Of course, every Bráhmaṇá [illegible] many [illegible] Sandhyá, and no good Hindu performs a religious rite in which the sun does not obtain his share of mantras or offerings; but that is quite distinct from initiation into the mantra of the sun, and the acceptance of that divinity as the god elect for one's salvation. In this latter sense, the worship of the sun has all but completely ceased for near a thousand years, and no great temple has been dedicated to him within the last six hundred years. The Black Pagoda of Konárak was designed for him about the middle of the thirteenth century, but only to replace an older one which had become dilapidated. The new structure, however, fell do[illegible]re it was consecrated, and was never rebuilt. In the Puri enclosure, there is a small temple containing an insignificant small figure of the sun, which is said to have been intended for the Konárak temple; but it is said to be the old one whose temple was being rebuilt and not a new one, and there is nothing to show that when it was made, the sun was received by any large number of persons as the deity for their salvation. The Kapila Saṅhitá praises the worship of the sun as a means of curing diseases, and the Konárak sun enjoyed its celebrity, because it had cured a prince of leprosy. The temple at Gwalior enjoyed the same credit, and other temples elsewhere likewise depend for their celebrity on their healing powers. The temple of Martaṇḍa at Kashmir is perhaps the largest ancient temple of the sun extant; it dates from the beginning of the sixth century of the Christian era, and at the time of its foundation, helioiatry might have been more current than in subsequent years, but the Rájatarangini, which inotices t, says nothing in favour of such a theory; the princes of the time, such as Gonardya and his immediate predecessors and successors, being described as S'aivas.

The worshippers of Gaṇes'a occupy even a more insignificant place in the Hinda community than the S'auras. According to Wilson, they "can scarcely be considered as a distinct sect: all the Hindus, in fact, worship this deity as the obviator of difficulties and impediments, and never commence any work, or set off on a journey, without invoking his protection. Some, however, pay him more particular devotion than the rest, and these are the only persons to whom the classification may be considered applicable. Gaṇes'a, however, it is believed, is never exclusively venerated, and the worship, when it is paid, is addressed to some of his forms, particularly those of *Vakratuṇḍa* and *Dhuṇḍirája*."† In Orissa, Darpana is the only place which is specially devoted to Gaṇes'a: there in a wild spot on a low hill a small waterfall and an insignificant temple are the objects of respect; but they never acquired any celebrity, and are generally looked upon with indifference. They are evidently of very modern date, as the Kapila Saṅhitá and other local legends have nothing to say about them. No Uriyá accepts the mantra of Gaṇes'a as the means of his salvation, and the god is everywhere looked upon as a subordinate individual, presiding over the department of learning and prosperity, but not a saviour. It should be added, however, that the festival of *Gaṇes'a-chaturthi* is observed more scrupulously by the Uriyás on the fourth of the wane in the month of Bhádra than by the Bengalis. The offerings at this festival are made on a pot of water which is placed in front of the worshipper, and not to any image, for it must be said to the credit of the Uriyás that, unlike the Bengalis, they do not, at their different fasts and festivals, make any image of clay for adoration for the occasion, and temporary clay images are all but unknown in their part of the country, the demand for such objects being confined to the small floating Bengali population.

Gánapatyas.

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* Essays, I., p. 266. † Ibid. I., p. 266.

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[illegible] the minor temples of [illegible] left [illegible]

[illegible]

[illegible]RS FROM B[illegible]

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No. 100. Ditto, showing a curious chignon of braided hair projecting behind the head, ... *ib.*
No. 101. Ditto ditto rising obliquely upwards, ... *ib.*
No. 102. Ditto showing a style of coiffure which ti... ...

PLATE XXVII.

ORNAMENTS FOR THE EARS AND HANDS IN ... ORISSA.

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No. 120. A shell-pattern ear-ornament with a tulip drop, ... *ib.*
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No. 122. Ear ornament of pearls and gold plates, ... *ib.*
No. 123. Bracelet and armlet, ... 99
No. 124. Ditto ditto, ... *ib.*
Nos. 125 and 126. Bracelets, ... *ib.*
No. 127. Bracelet, armlet and ring, ... *ib.*
No. 128. Bracelet and armlet, ... *ib.*
No. 129. Ditto ditto, ... *ib.*

PLATE XXVIII.

ORNAMENTS FOR HANDS, LEGS AND FEET.

No. 130. Bracelet and armlet, ... 99
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No. 133. Ornament for the ankle (gujri), ... *ib.*
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No. 135. Ditto for the foot, ... *ib.*
No. 136. Ditto for the leg, ... 100
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PLATE XXIX.

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No. 177. Copper lance-head; from ditto, ... *ib.*
No. 178. Double-bladed sword; from Bhuvanes'vara, ... *ib.*
No. 179. Ditto with a different kind of handle and guard; from ditto, *ib.*
No. 180. Broad, straight sword, broken; from ditto, ... *ib.*
No. 181. Jagged sword, straight blade and handle; from ditto, ... *ib.*
No. 182. Straight sword, good modern handle, lancet-head; from ditto, *ib.*
No. 183. Ditto in scabbard, common in Bhuvanes'vara and Sánchi, ... *ib.*
No. 184. Lancet-headed dagger; from Bhuvanes'vara, ... 123
No. 185. Deer-head handled dagger; from ditto, ... *ib.*
No. 186. Nepalese knife or kukri; from ditto, ... *ib.*
No. 187. Ganes'a's battle-axe; from ditto, ... 122
No. 188. Battle-axe, broad blade; from ditto, ... *ib.*
No. 189. ... ditto, ... *ib.*
... Bhilsa Topes, ...
No. 191. ... ditto, ... *ib.*
No. 192. ... crescent-bladed ... from ... ditto, ... *ib.*
No. 193. Trident; from ditto ditto, ... *ib.*
No. 194. Elephant goad; from ditto ditto, ... 134
Nos. 195 and 196. Tridents; from ditto ditto, ... 122
... Crescent headed lance; from ditto ditto, ... *ib.*
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199. Discus; from Bhuvanes'vara, ... 121
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202. Long club; from ditto, ... *ib.*
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No. 219. Flag; from Sánchi, copied from Cunningham's Bhilsa Topes, 120
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No. 214. Ditto; from ditto ditto, ... *ib.*
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No. 174. Conchshell; from ditto, ... *ib.*

PLATE XXXI.

A NICHE FROM THE GREAT TOWER OF BHUVANES'VARA.

The niche is situated on the northern side of the Great Tower. There are twelve such on the Temple, two on each side-pier; the front being covered by the Jagamohana there is none on that side. The scroll-work bands round these niches have been executed with great care, and are the finest specimens of the kind of work at Bhuvanes'vara. The central figure in the niche shown on the plate is that of Indra seated on his famous white elephant. Indra's figure is very much mutilated, but the elephant is all but perfect, wanting only the off hind leg and the tail. On each side of the elephant there is a female attendant holding a chauri. Above her are two sangstresses seated on full-blown lotuses. Over the latter appear two dancing girls engaged in their vocation; then, two musicians playing on mridanga; and lastly two fairies bringing garlands for the divinity in the centre. The upper three groups are represented walking on masses of clouds, as befitting the retinue of the god of the firmament. The figures on the right side are very much mutilated. The figures enclosed in the loops of the scroll-work bands on the two sides include a pigeon, a fish, a dog, a buffalo, three elephants, a long-haired Yamuná giri goat, four bears, deer, a turkey, two sheep, and a boy. (See Illustrations Nos. 14 and 16. Plate VI[illegible] or frieze, the u[illegible] frame [illegible] two flying fair[illegible] the flying [illegible] female same positi[illegible] and holding with a garland [illegible] and the third, a stout athlete sup[illegible]ng, in a crouching position, the weight of the superstructure. The three figures of the left side are repeated on the right side, but the gong is replaced by cymbals, and the garland by a dholak. The crest on the top of the first cornice has carved athlete wrestling with a hound. The wrestler is [illegible]ced on the crest of the second cornice, but without the dog, ... 4

PLATE XXXII.

A NICHE FROM THE TEMPLE OF BHAGAVATI.

The style and decorations of the niche are entirely different from those of the preceding. The figure in the centre is that of the four-handed Bhagavati, standing on a lotus. On each side of the lotus is a chakora, or the bartavello—*Tetrao rufus*, which bird is said to live upon the nectar of the moon, and mistaking the feet of the goddess for moons has come for its favorite drink. The other figures are attendants of the presi[illegible] goddess,... 14

PLATE XXXIII.

ARCHITECTURAL ORNAMENTS FROM THE GREAT TOWER OF BHUVANES'VARA.

No. 46*a*. Represents the interior of a room, with a lady of rank seated on an ottoman or *takht*, [illegible]sting her left hand on a pillow behind, and having a woman squatting on the ground in front, probably a story-teller, with two attendants behind her. On each side of this group there is an attendant holding a chauri. There is also a boy behind the mistress of the room. Over the room is shown the peculiar eccentric ornament noticed on page 48; it is supported, on each side, by a female figure. The ornament has very much the appearance of a coat of arms. A second version of this coat of arms occurs on the top of the first, differing only in a few minor details. There are at least t[illegible]ty such interiors of rooms shown on the Great Tower, but the [illegible]upants are differently disposed, ... 106

No. 46*b*. Is from the temple of Bhagavati. It shows a most elaborate specimen of the ornament, which, for want of a better name, I have called a coat of arms. Of course it is a purely architectural ornament, and neither owes its origin to European coats of arms, nor does it subserve their purpose, ... 43

PLATE XXXIV.

DOMESTIC VESSELS.

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No. 152. Ditto,—largest size seen four feet; smallest two feet; I do not remember the exact size of the one from which the drawing was taken, ... *ib.*
No. 153*a*. A water carafe or goglet. It was in use in Bengal up to the beginning of this century, and was called *Amrit* or nectar vessel. *ib.*
No. 153*b*. Ditto. The height differs in different specimens from twelve to fourteen inches,... ... ... *ib.*
No. 161. A bowl for keeping milk or sherbet. The height in [illegible] specimens varies from 8 to 10 inches, ... *ib.*
No. 158. A wine cup. Height 3 inches, breadth 3½ inches, *ib.*
No. 159. Ditto. Height 4 inches; breadth 2½ inches, ... *ib.*
No. 160. A square cup. Height 6 inches; breadth 4 inches, ... *ib.*
No. 162. A circular bowl. Height 5 inches; breadth 6 inches. The original is in the ha[illegible] of Ganes'a, (Illustration No. 61), wher[illegible] number[illegible]lar cakes [illegible]h the god is fe[illegible] *ib.*
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[illegible] *ib.*
[illegible] ... *ib.*
[illegible] *ib.*
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[illegible] 14
[illegible] Temp[illegible]
[illegible]-petalled flowe[illegible]
[illegible] The effect is very striking. [illegible]med
[illegible]-petalled flowers lying flat side[illegible]nd looking
[illegible] like the ball flower of the mediæv[illegible]pean artists.
[illegible]r line is formed of scroll-work. On t[illegible]dle of the band
[illegible] a square pannel bearing the figu[illegible]le in a grotesque
[illegible] with a youth striding across he[illegible] thigh: both the
[illegible]d in high boots.
[illegible] bracket of an elegant design from the Rájarání Temple.
No. 145. Floral bands from the sides of the above.
No. 146. Detail from a pilaster in the Vaital Deúl. In the original the lowest frame contains a group,—a cavalier with a crouching human figure under his horse, and having a lion and a camel behind him. (This portion is not shown in the plate.) Above it is an oblong carved pannel, surmounted by a semicircular arch formed of half a lotus flower. The artist seems to have been a close observer of nature, and taken pains even to reproduce the mouths of the ovaries in the thalami of the flowers. The lotus flower is of the conventional type. As an architectural ornament it is very effective.

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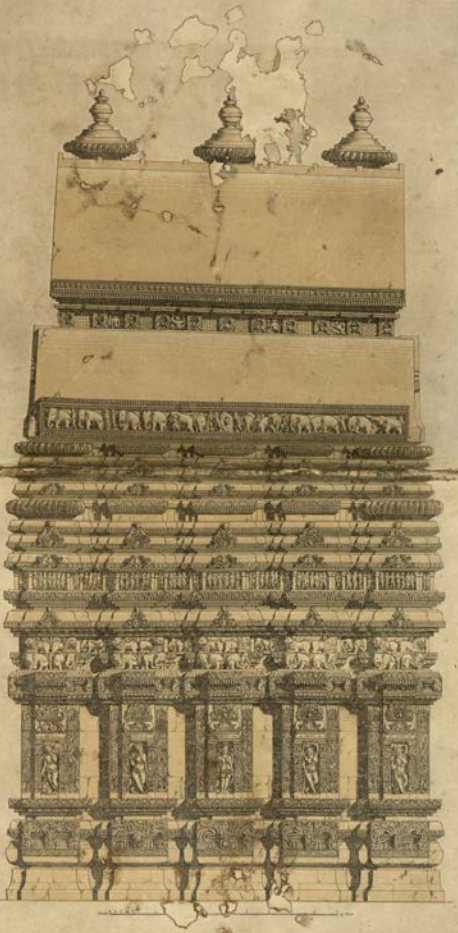
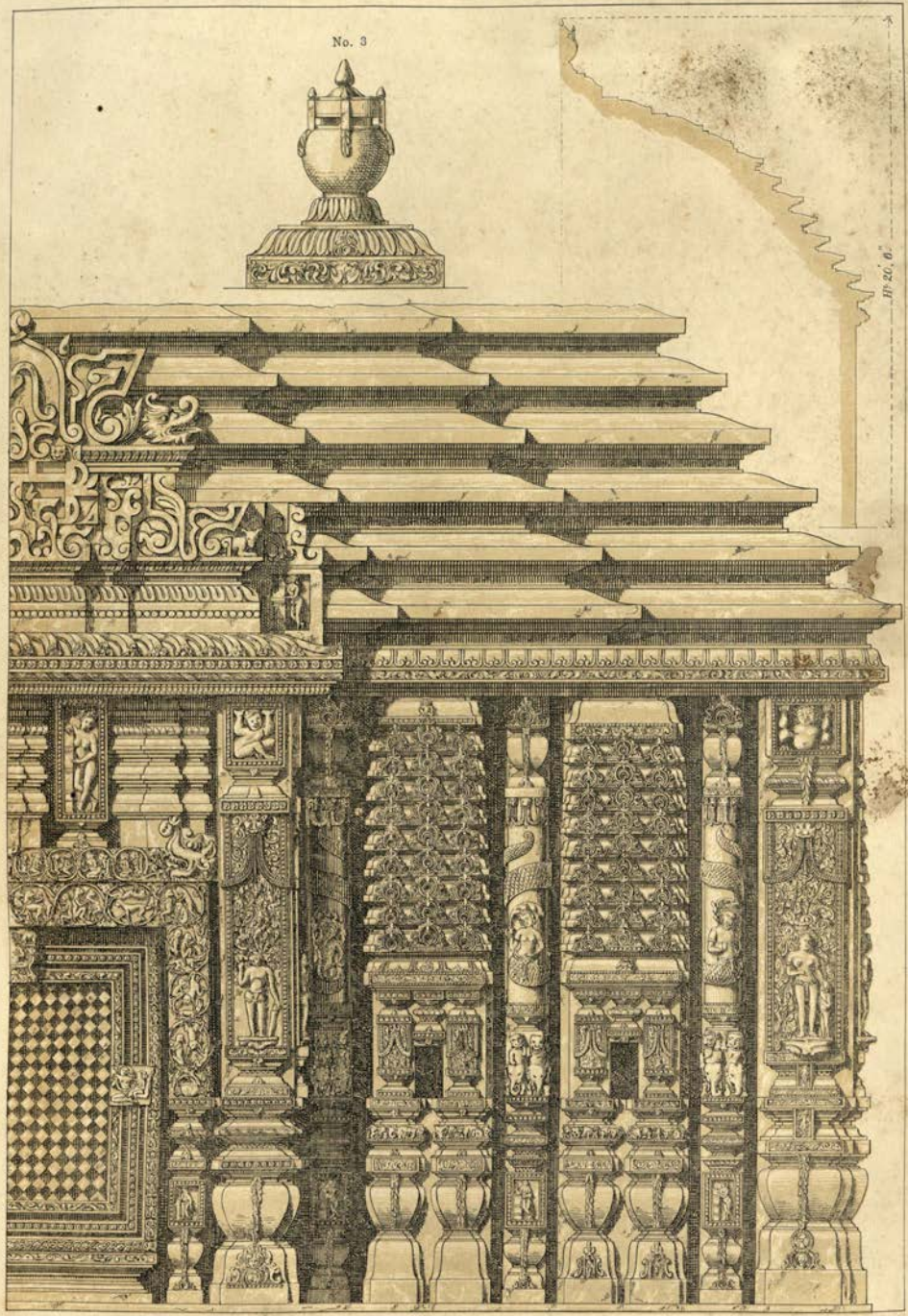


VAITAL DEUL, BHUBANESWAR.



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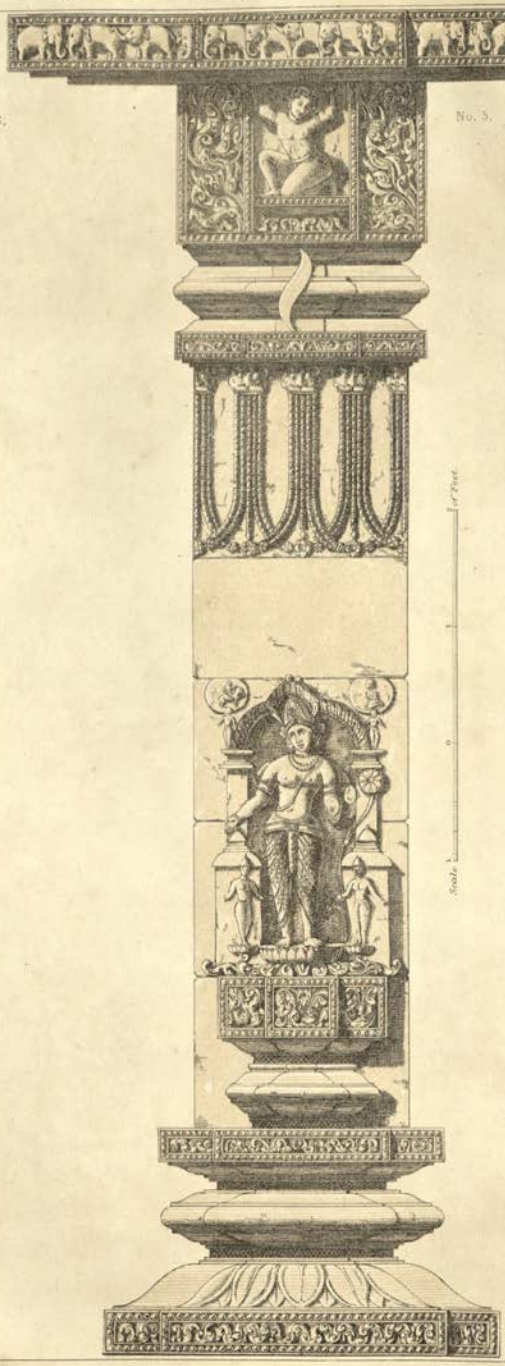

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No. 4b.

No. 4a.

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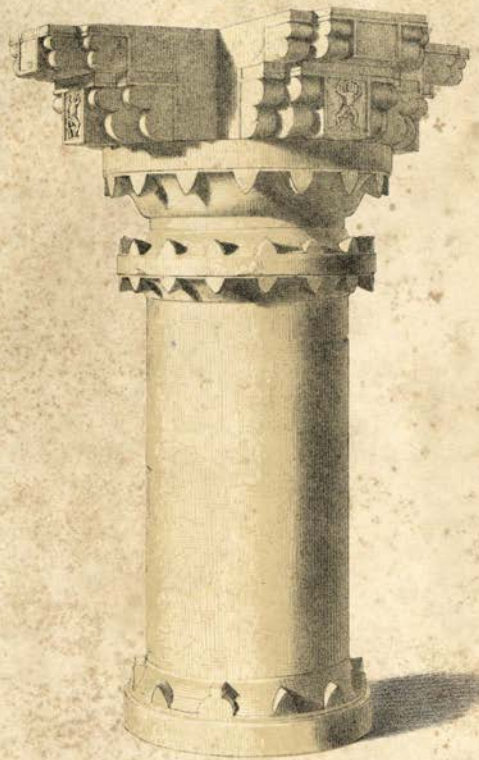

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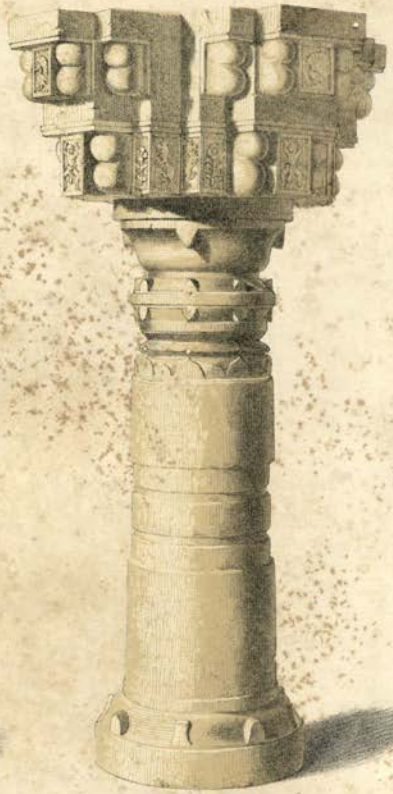

Height 9 ft. 6 in.

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Scale of 0 1 2 3 inches.

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Scale of 0 1 2 3 inches

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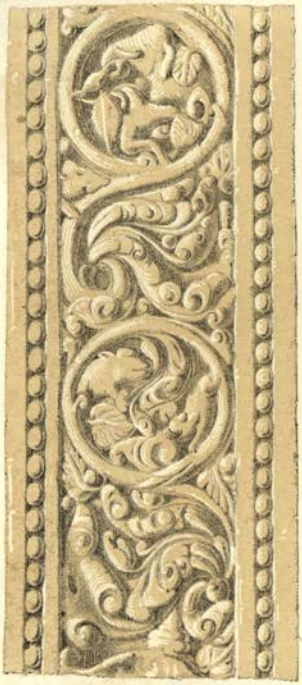

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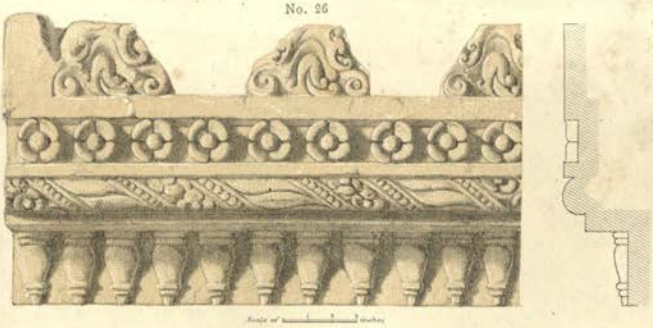

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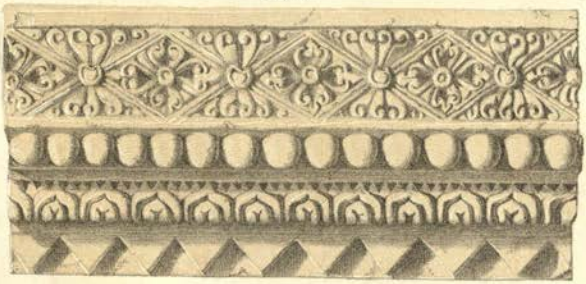

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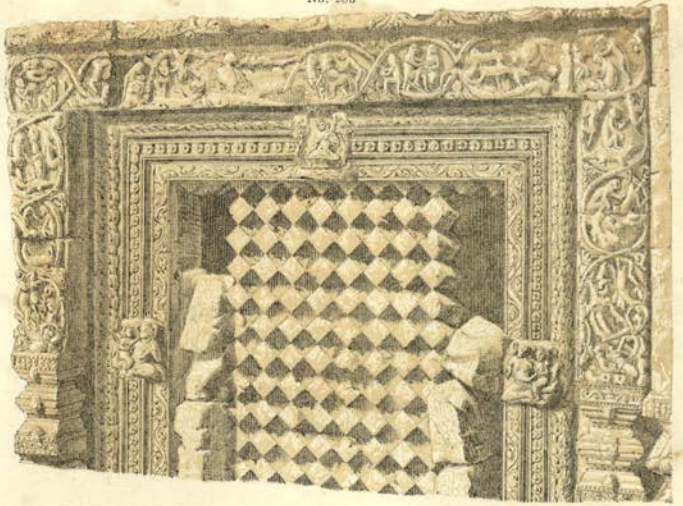

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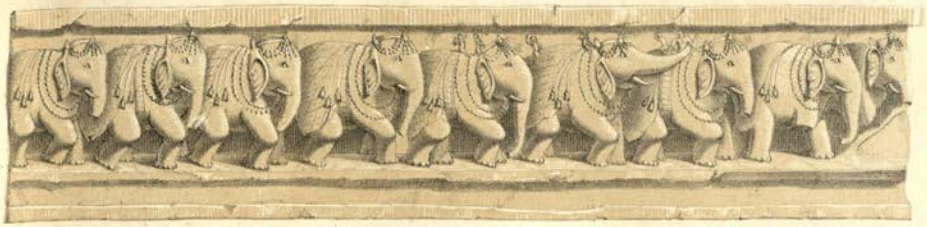

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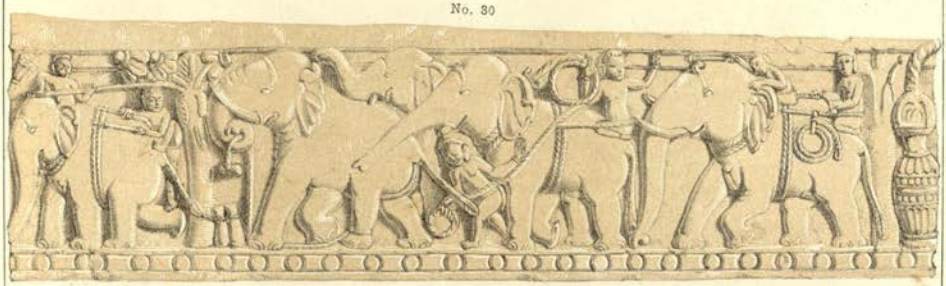

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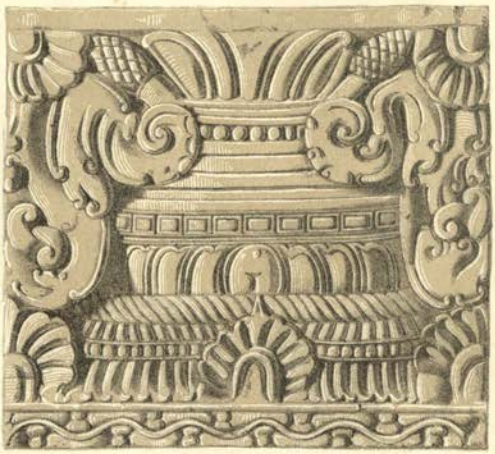

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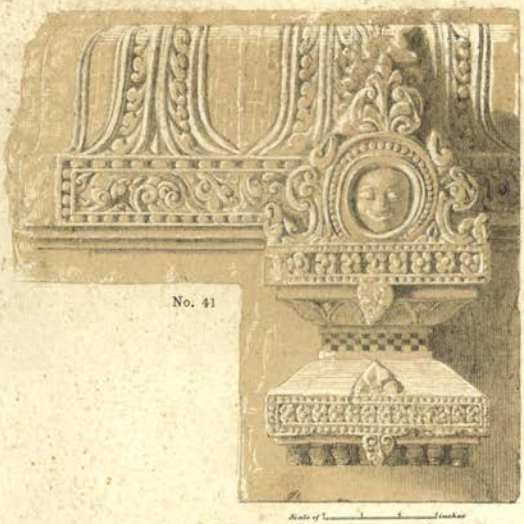

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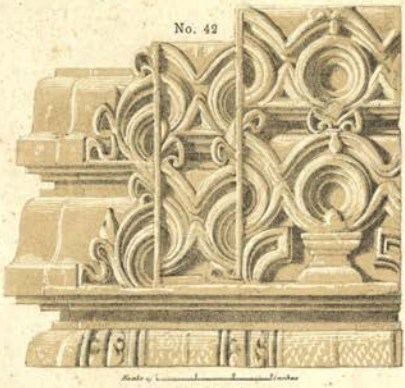

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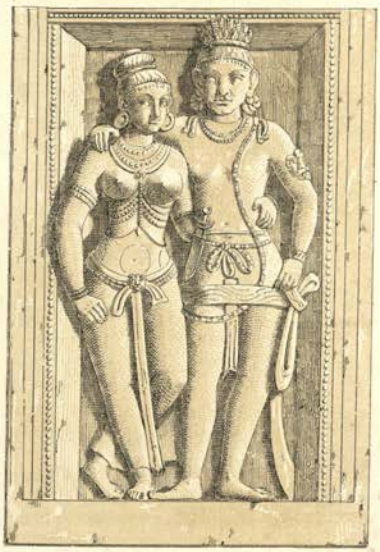

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No. 65b.

Scale of 1 0 1 Inches

No. 65c.

Scale of 1 0 1 Inches

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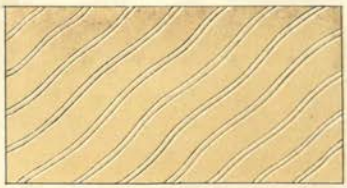

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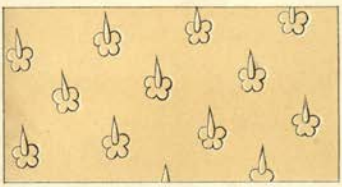

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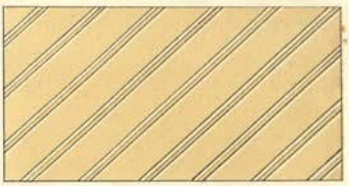
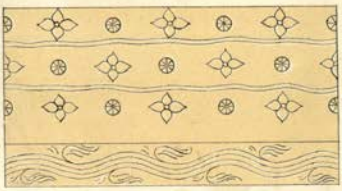
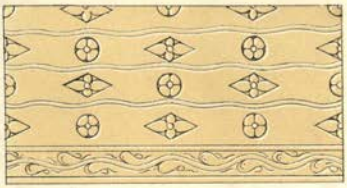


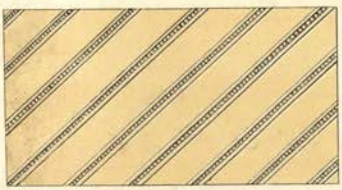
No. 74



No. 72



No. 68



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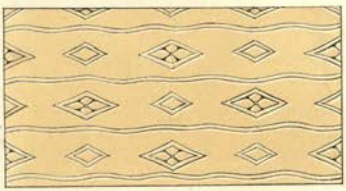
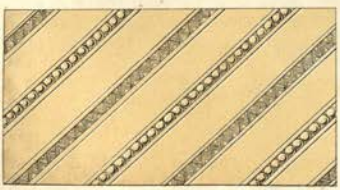


No. 67



No. 75

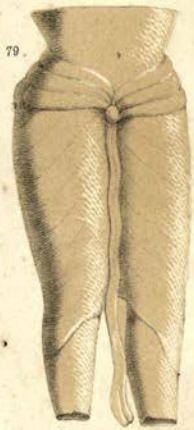
Lithographed by Muktaram Adhikhari, Student, Govt. School of Art, Calcutta.

No. 76

No. 77

No. 78

No. 79.



No. 80

No. 81

No. 85

No. 84

No. 86

Lithographed by Chunilal Dass, Student, Govt. School of Art, Calcutta.

No. 90

No. 83

No. 89

No. 92

No. 93

No. 91

No. 88

No. 87.

No. 94 a

Lithographed by Chunilal Das, Student, Govt. School of Art, Calcutta.

No. 94

Height of figure 4-4.

Lithographed by Chunilal Das, Student, Govt. School of Art, Calcutta.

No. 95

No. 97

No. 98

No. 96

No. 99

No. 100

No. 101

No. 102

No. 103

No. 104

No. 106

No. 105

No. 107

Drawn and lithographed by A. P. Bagchi, Student, Govt. School of Art, Calcutta.

No. 108

No. 109

No. 110

No. 111

No. 112

No. 115 A

No. 115

No. 116

No. 114

No. 113

No. 117

Drawn and Lithographed by A. P. Bagchi, Student, Govt. School of Art, Calcutta.

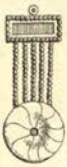
No. 118

No. 119

No. 120

No. 121

No. 122



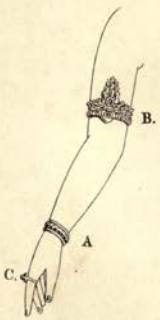
No. 123

No. 125

No. 126

No. 124

No. 127



No. 128

No. 129

Lithographed by S. Sedgfield, Calcutta.

No. 130

No. 131

No. 132

No. 133

No. 134

No. 135

No. 136

No. 137

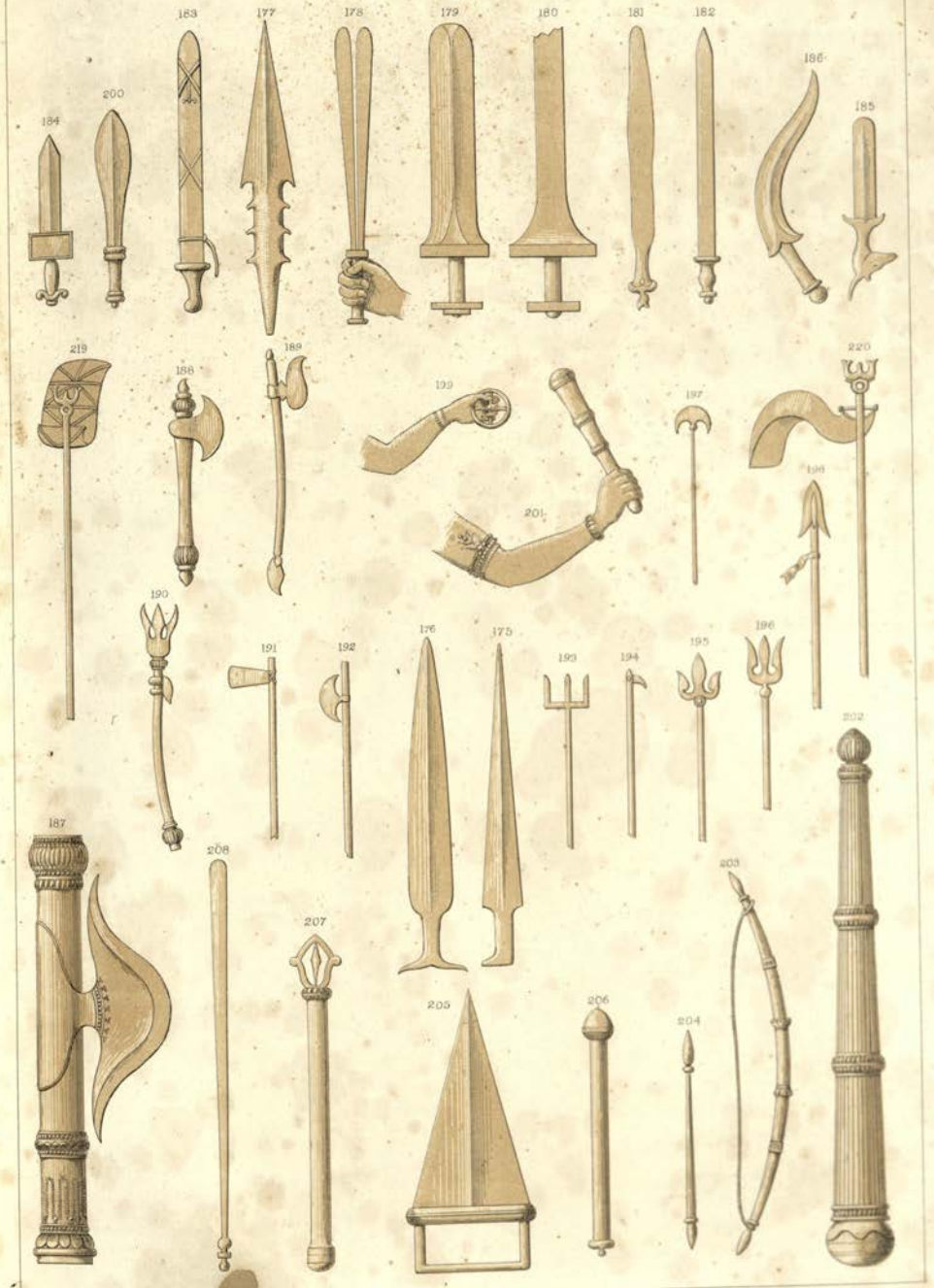
No. 138

No. 139

No. 140

No. 141

Lithographed by S. Seigfield, Calcutta.

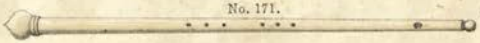


Lithographed by S. Sedgfield, Calcutta.

No. 164.

No. 166a.

No. 171.



No. 170.

No. 169.

No. 174.

No. 173.

No. 218.

No. 168.

No. 167.

No. 217.

No. 209.

No. 215.

No. 213.

No. 214.

No. 216.

No. 211.

No. 212.

No. 210.

Lithographed by Chunilal Das, Student, Government School of Art, Calcutta.

No. 48 a.

Drawn and lithographed by A. P. Bagchi, Student, Govt. School of Art, Calcutta.

Lithographed by A. P. Bagchi, Student, Govt. School of Art, Calcutta.

No. 46a.

Scale of inches

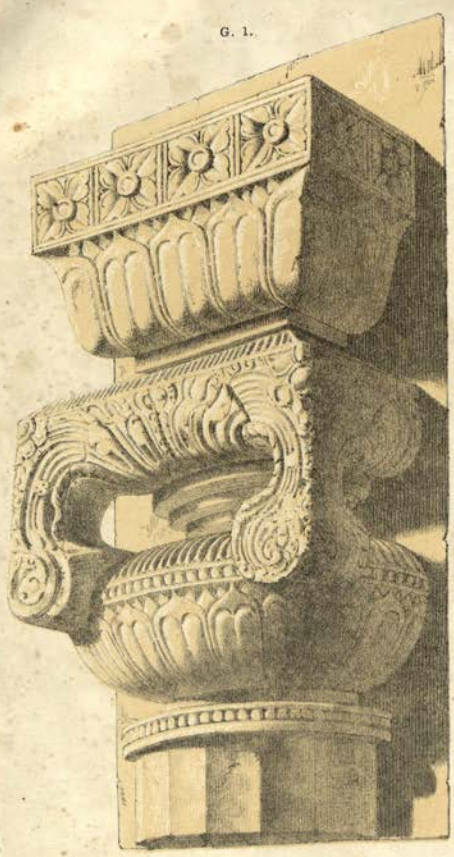
No. 46b.

Scale of inches

Drawn and lithographed by Udaya Chand Samanta, Student, Govt. School of Art, Calcutta.

Drawn and Lithographed by Rasik Chundra Bara, Student, Govt. School of Art, Calcutta.

G. 1.



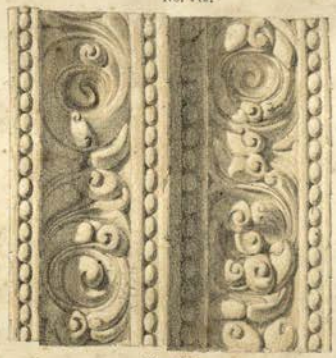
F. 3.

Lithographed by Rasick Chundra Bas[illegible]dent, Govt. S[illegible]ool of Art, Calcutta.

No. 143.

No. 144.

No. 145.



No. 146.

Drawn and Lithographed by Udayachand Saman[illegible] Gov[illegible]nt School of Art, Calcutta.

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